Implementation of the support to the Transport Sector Development Programme
Lot 2: Editing and publishing of comprehensive transport sector guidelines
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Comprehensive Guidelines for Sustainable Transport: a Corridor approach

DRAFT
September 2016
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- vs. DRAFT -
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A project implemented by NTU/LB Consortium
This Guidelines are presented in a draft version based on the revisions and consolidation of the contributions received by a number of specialists and sector experts, whose involvement in the Guidelines process started in March/April 2016 and was completed by August 2016 with production of final draft modules that are presently incorporated in a single document, constituting the Draft Guidelines. The finalisation of the Guidelines, including overall editing, is scheduled in October 2016. The final version of the Guidelines shall be available by early November 2016.

The Guidelines have been produced under the responsibility and coordination of Philippe CABANIUS, Team Leader and Francis CHIRIMUUTA, Legal Expert.

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COMPREHENSIVE GUIDELINES FOR SUSTAINABLE TRANSPORT: A CORRIDOR APPROACH

Table of Contents

Introduction

Part One: Cross Cutting Areas for Corridors Development & Improvement

Module 1: Developing Coherent Transport Corridor Policies
Module 2: Assessing Transport Corridors Performance
Module 3: Ensuring Sustainability and Good Governance
Module 4: Building Functional Corridor Transport Transit System
Module 5: Transit Corridor Agreements: Backbone of Integration
Module 6: Developing Intelligent Transport Systems: Concepts and Methodology
Module 7: Private Sector Involvement for Developing & Financing Transport Infrastructure Projects and Services.

Part Two Regional Economic Communities (Rees)& Corridors Management Institutions (CMIs): Pillars of The African Integration

Module 8: Role of the RECs: Pillars of the African Integration

8.1 Introduction to the RECS
8.2 Establishing an Institutional Framework for RECs Transport Development and Management in West and Central Africa
Module 9: Review of the RECs activities in West, Central, East and Southern Africa

9.1 General Overview of the RECs and the SECs
9.2 Strengthening RECs in the transport sector in East and Southern Africa
Module 10: Corridor Management Institutions (CMIs)

10.1 Corridors Institutional Framework and Organization
10.2 Financial & Human Requirements for effective functioning of the CMIs (based on South Africa experience)
Module 11: Review of the Transport Corridors in West & Central and in East and Southern Africa

11.1 Review of the transport corridors in West, Central & East Africa
11.2 Review of the transport corridors in Southern Africa
Part Three: Modal Transport Areas

Module 12: Road Infrastructure:
  12.1 Multiyear Performance Based Contracts
  12.2 Second Generation of Road Funds

Module 13: Improving Ports Efficiency & Establishing Hub Ports
  13.1 Improving Ports Efficiency
  13.2 Establishing Hub Ports

Module 14: Railways: A Competitive Mode of Transport & Railways Concession in Sub-Saharan Countries
  14.1 A Competitive Mode of Transport
  14.2 Railways Concession in Sub Saharan Countries

Module 15: Inland Waterways Transport: A Potential Competitive Mode of Transport

Part Four: Soft Issues in Transportation

Module 16: Road Transport Services in West & Central Africa and in East & Southern Africa
  16.1 Road Transport Services in West & Central Africa
  16.2 Road Transport Services in East & Southern Africa

Module 17: Road Safety & Pollution
  17.1 Road Safety Issues - Challenges and Management
  17.2 Air Quality Management in National and Trans African Road Corridors

Module 18: Aspect of Trade & Transport Facilitation: the example of West Africa

Module 19: Multimodal Transport to Enhance Competitiveness of the African Freight Logistics Industry
0 Introduction

0.1 Regional Integration & Recent Initiatives

The importance of regional integration for supporting Africa’s economic development has long been recognized by African leaders who have consistently expressed a political consensus to build a common market for goods and services.

Yet, Africa remains the least integrated continent physically and economically with low levels of intraregional trade and the smallest share of global trade of the world.

Infrastructure inefficiencies are costing tens of billions dollars annually and stunning growth. African infrastructure networks are still lagging behind those of other regions. Developing the necessary infrastructure is thus vital for economic advancement and sustainable development.

The challenge need to be addressed through regional and continental cooperation and coordination in order “to implement policies and projects which can create conditions that will result in stronger markets, enhanced trade integration and sustainable growth to benefit the people and nations of Africa”. (Transport Policy Framework)

The African Union Commission (AUC), in partnership with the United Nations Economic Commissions for Africa (UNECA), African Development Bank (AfDB) and the NEPAD Planning and Coordinating Agency (NPCA) have adopted the Programme for Infrastructure Development in Africa (PIDA) at the AU 18th Ordinary Session in Addis Ababa, Ethiopia in January 2012.

PIDA provides new analysis and insight to bring together, under one coherent programme, existing or previous continental infrastructure initiatives. The essential benefits of this regionally integrated approach to infrastructure development and services are to make possible the formation of large competitive markets in place of small, isolated, and inefficient ones and to lower costs across production sectors. PIDA has identified key regional and continental orientations which will create a shift from overseas trade to trade between countries and within and across regions, helping fulfill the promise of the 2028 African common market.

The PIDA is supported by the EU and represents a common agreed policy dialogue framework under the Joint Africa EU Strategy (JAES) for the development of the transport sector as highlighted during the 4th Africa–EU Summit of April 2014 which concluded that in the field of transport “the partners

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1 PIDA provides a common framework for African stakeholders to build the infrastructure necessary for more integrated transport, energy, ICT and trans-boundary water networks to boost trade, spark growth and create jobs. Implementing PIDA will transform the way Africa does business, help deliver a well-connected Africa and realize the building of the African Economic Community, outlined in the 1991 Abuja Treaty. Given Africa’s urgent infrastructure needs, have been identified a Priority Action Plan (PAP) have been identified which details the immediate way forward by presenting a list of projects and programs that could promote sound regional integration by 2020. Projects were prioritized based on three criteria categories: (1) eligibility and regional integration; (2) feasibility and readiness; (3) development impacts. Considering transport, the PAP includes projects covering connectivity, corridor modernization, ports and railways modernization; “To put this ambition into practice needs strong political leadership and ownership”.

2 The purpose of the JAES is to develop a political vision and practical approaches for the partnership between the EU and Africa, based on mutual respect, common interests and the principle of ownership. One of the eight separate thematic Partnerships is “Regional Economic Integration, Trade and Infrastructure”.

will strive for the reduction of transport costs and boosting of intra-African trade by bringing regional transport corridors to an adequate level of service, which is sustainable, safe and reliable”.

The Joint EU-Africa Strategy Reference Group on Infrastructure which took place in February 2016 in Addis Ababa reinforced this strategy through a Statement which provides for a commitment to “...foster sustainable and inclusive development and growth and deeper continental integration to develop sustainable, affordable and integrated transport infrastructure networks

<table>
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<th>Statement for the College to College (C2C)</th>
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<tr>
<td>• Foster <strong>sustainable and inclusive development and growth and deeper continental integration to</strong> develop sustainable, affordable and integrated transport infrastructure networks;</td>
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<tr>
<td>• Commitment to working towards reducing the transport costs and eventually the cost of doing business in order to enhance Africa’s competitiveness and increase Africa’s market share of the total world trade.</td>
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<td>• Continuing efforts of boosting of intra-African trade by improving regional transport corridors to an adequate level of service, through a visionary transport policy white paper and transport sector guidelines for the African Continent that reconciles the sustainable development objectives with the evolving challenges of the Climate Change Agenda, Migration and the 2030 Agenda for all modes of transport.</td>
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<td>• More emphasis on moving towards multimodal and smart corridor approaches and concepts and its implementation.</td>
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<td>• Develop continental initiates for road safety programmes aimed at reducing road accidents and deaths as well as addressing safety and security issues, especially in air and maritime transport.</td>
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<td>• Efforts to be continued and intensified towards improving aviation and maritime safety as well as development and deployment of the European Geostationary Navigation Overlay Service (EGNOS) into Africa.</td>
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This Statement was subsequently submitted to the College to College (C2C) meeting which was held in Addis Ababa in April 2016.

0.2 A Sectoral Approach

In order to increase the efficiency and effectiveness of the transport sector, the European Commission has developed a “**Sectoral Approach in Practice**”.

A **sectoral approach** means that **infrastructure** – roads, railways, ports, river and airports – are analyzed in relation to economic sectors such as agriculture, industry, mining and tourism and to their respective economic operators: farmers, industrialists, and their workers.

To ensure that the transport sector respond to demands, a **continuous dialogue between government and transport users and beneficiaries** is required. Dialogue is the only way of ensuring that transport is linked to demand in a sustainable way.

As the concern is on large regional corridors with a high potential for economic growth, actions concerning sector governance should logically aim at also creating a **dialogue with neighboring**

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3 “Towards Sustainable Transport Infrastructure (TSTI): A Sectoral Approach in Practice” - EU Transport sector Guidelines prepared by the European Commission Directorate General for Transport. These Guidelines were developed in consultation with Members States and published by the European Commission in July 1996.
countries under the initiative and coordination of sub-regional groupings such as the Regional Economic Communities (RECs).

In addition to users and beneficiary involvement and support, sustainable infrastructure depends on a number of interrelated factors such as optimizing the use of the different transport modes and improving intermodal efficiency along the transport corridors and, most importantly, securing flow of sufficient funds for operation and maintenance.

Furthermore, transport needs to be run as a business and this implies re-defining the responsibilities and tasks of institution involved in transport. The most efficient structure would be for government to focus on policy making and regulation and to place network management on a more commercial basis and where appropriate within autonomous agencies. More commercial management opens the way for greater private sector participation.

Finally, transport must also (i) respond to social needs such as education and health of rural and urban populations, food security and poverty alleviation, gender needs; (ii) enforce safety standards through better design and maintenance standards in the infrastructure itself as well as adequate regulatory control and enforcement procedures; and (iii) integrate environmental issues to mitigate in particular the rapid growth of motorization resulting in air pollution, road crashes and fatalities, increased greenhouse gas (GHG) emissions.

0.3 Purpose of the Guidelines

The Comprehensive Transport Sector Guidelines aims at:

- Providing the RECs with a framework when assessing the performance of a regional corridor or seeking to improve its functioning across the various modes of transport;

- Formulating with stakeholders involvement, appropriate and affordable transport corridor development strategies and plans;

- Developing a sustainable transport approach covering the different modes of transport (infrastructure, means of transport and transport services);

- Optimizing the use of the different transport modes along a corridor and improving intermodal efficiency;

- Responding to new and innovative funding mechanisms for operating and maintaining existing transport corridors and for involving private investment in corridor infrastructure investment;

- Identifying appropriate decisions to regulate, organize, promote and financed improved regional and continental transport infrastructure and services, through “safe, environmentally, friendly, affordable, reliable and secure trans-boundary transport corridors and harmonized transport policies”
INTRODUCTION

• Recommending institutional reforms and legal and regulatory measures to correct inefficiencies along the corridors governance such as lack of competition between transport services and unjustified monopolistic situation;

• Enhancing trade policies, transit and trade facilitation measures to encourage and increase trade traffic flows along the corridors;

• Harmonizing and enforcing transport regulations, standards and procedures;

• Encouraging the wider adoption of international transport recommendations and conventions;

• Addressing environmental aspects, such as green transport solutions, climate change aspects as well as cross cutting issues (security & road safety, rural access, HIV/AIDS & health, employment & gender issues) and remedial measures to avoid or mitigate any negative impacts.

0.4 Content of the Guidelines

The Guidelines Structure and Methodology were approved in the first Validation Workshop which took place In Addis Ababa (23-24 February 2016). It was endorsed that the Guidelines are “..focusing on how improving connectivity on regional and/or continental networks with high (regional and international) trade capacity as key to fostering trade and development.”

The Guidelines are structured in four main Parts:

PART ONE covers seven cross cutting areas for Corridor development and improvement. They provide a general framework for corridor performance monitoring and assessment

PART TWO focuses on the Regional Economic Communities (RECs) recognized by the African Union (AU) as the “buildings blocks for continental integration” and the issues faced in fulfilling their missions in respect of the transport sector. The role of Corridor Management Institutions (CMIs) is also reviewed and analysed.

PART THREE covers the key modal issues to be addressed under a sectoral approach for each land transport modes (ports, roads, railways, inland waterways transport) which together constitute the connectivity network between port and the hinterland.

PART FOUR reviews soft issues in transportation: road transport services, trade and transport facilitation, and multimodal transport.

Annex 1 provides the list of the experts who contributed to the preparation of the Guidelines.

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5 African Union Banjul Summit (July 2006)
0.5 Beneficiaries of the Guidelines

“The main beneficiaries of the project are the Regional Economic Communities traversed by transport corridors, and their Member States…”

In other words, these Guidelines are drafted to assist, in priority, Regional Economic Communities (RECs) in their dialogue with national, provincial and local governments as well as with the public and private transport agencies and organizations in charge of corridor infrastructure, management, operation, and maintenance, private sector transport operators and other corridor users.

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6 Terms of Reference Lot 2 p.13
Annex: The EU Sectoral Approach

<table>
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<tr>
<th>THE EU SECTORAL APPROACH</th>
<th>Essential of a Sectoral approach</th>
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<tr>
<td>“The “sectoral approach” should ensure transport investments respond to the needs of users and beneficiaries at country and regional level and are coherent with the government and donor development objectives. (...) To ensure that the transport sector responds to demand, there must be continuous dialogue between government and transport users and beneficiaries (...) Dialogue is the only way of ensuring that transport is linked to demands in a sustainable way” (p.12)</td>
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<td>“A “sectoral approach” links the provision and operation of transport infrastructure to the demands of beneficiaries. This means infrastructure - roads, railways, ports and airports – must be considered in relation to economic sectors such as agriculture, industry, mining and tourism, and their beneficiaries – farmers, industrialists and their workers. Transport infrastructure must also respond to social needs such as education and health of rural and urban populations. Thus to ensure that the transport sector responds to demands, there must be continuous dialogue between government and transport users and beneficiaries. Dialogue is the only way of ensuring that transport is linked to demand in a sustainable way”. (p.15).</td>
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<td>“In addition, to users and beneficiary involvement and support, the most important is a secure flow of sufficient funds for operations and maintenance. Furthermore transport needs to be run as a business and this implies re-defining the responsibilities and tasks of institutions involved in transport. The most efficient structure would be for government to focus on policy making and regulations and to place network management and maintenance on a more commercial basis, where appropriate in autonomous agencies. More commercial management then opens the way for greater private sector participation.” (p.15)</td>
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<td>“This approach is valid for all transport modes - roads, railways, air, maritime and waterways transport – as well as the services to facilitate movement of goods and people (...). The “sectoral approach” for reaching development goals is based on principles that transport meets stakeholder needs, is safe, affordable and efficient and has minimal negative impact on the environment.(p.4)</td>
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<td>Greater transport efficiency relies on public-private partnerships with government taking a more supervisory and regulatory role. The free flow of transit traffic will contribute to integrating the developing countries into the world economy. And transport must be safe for all and provide mobility, equitable services and opportunities for men and women, particularly the poor. (p.4)</td>
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<tr>
<td>“A framework of principles is therefore proposed which includes common development principles for transport as well as principles for fostering economic and social development, integrating the developing countries into the world economy and the fight against poverty.” (P.12-13).</td>
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<tr>
<td>“Taking a sectoral approach is vital for integrating transport modes and their services for better ensuring transport beneficiaries and affordable and safer transport (p.22)</td>
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<td>“At a regional level, the Community and the Member States have the opportunity to play a unique role in developing regional initiatives, supporting regional transport transit corridors thus bringing added value to, and complementing trade and transport activities at national level (...) for facilitating regional integration and trade” (p. 25).</td>
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</tbody>
</table>


MODULE 1
DEVELOPING COHERENT TRANSPORT CORRIDOR POLICIES

By Philippe Cabanius

Table of Contents

1 Existing Situation
   1.1 Low priority for corridor maintenance
   1.2 Public sector dominance negatively affects the efficiency of the transport system
   1.3 Lack of regulated criteria for authorizing operators to participate in transit operations results in a less efficient transport system
   1.4 Freight allocation systems and other limitations on the flexibility of trucks operations
   1.5 Poor application of the regulatory framework for intra-regional and international trade
   1.6 Costly transport services hamper trade competitiveness
   1.7 Environmental issues impacting on transport policy
   1.8 High accident levels

2 Making A Transit Corridor Functional
   2.1 Guiding Principles
   2.2 Involving all stakeholders
   2.3 Securing Finance
   2.4 Developing a commercial approach
   2.5 Optimizing public private partnership
   2.6 Optimizing and integrating existing facilities
   2.7 Monitoring the evolution of the corridor
   2.8 Transit traffic must move freely and rapidly
   2.9 Integrating environmental objectives
   2.10 Integrating safety objectives

(*) see 3 RECOMMENDED APPROACH by Francis Chirimuuta p. 11
2.11 Integrating social objectives (fight against poverty, rural access to transport, employment, gender issues and health) ........................................................................................................... 11

3 Recommended Approach to Developing Coherent Transport Corridor Policies............ 12

3.1 Defining and Developing a Regional Transport Corridor Network............... 12

3.2 Assessment of the fundamentals for transport corridor development .................. 12

3.2.1 Corridor maintenance......................................................................................... 13

3.2.2 Harmonisation of objectives............................................................................ 13

3.2.3 Regulated transit operations ........................................................................... 13

3.2.4 Freight allocation systems ............................................................................... 13

3.2.5 Regulatory framework for regional trade ...................................................... 13

3.2.6 Transport corridor related costs...................................................................... 14

3.2.7 Environmental protection.............................................................................. 14

3.2.8 Corridor safety ............................................................................................... 14

3.3 Developing a Functional Regional Transport (Transit) Corridor ....................... 14

3.3.1 Smart Corridor concept................................................................................... 15

3.3.2 Corridor Development Coordination and Management Institutions.............. 15

3.3.3 Critical factors in implementing the smart corridor concept and establishing CDCMIs, the RECs and the member States shall pay particular attention to the following factors that will ensure the success of functional regional transport corridors:................................................................. 16
Regional transport transit corridors are a network of interconnected national transport networks, whether existing or intended, that interconnect national economic and social zones. They play a unique role in facilitating regional integration and trade and at the same time complement and add value to trade and transport activities at national level.

The development of a “regional corridor policy” must be based on an assessment of the existing situation along the intended transport corridor and application of the principles governing the functionality of a transport corridor.

1 Existing Situation

The White Paper on Transport Policy has identified a number of bottlenecks relating to the operations of transport and cross border trade along a corridor. Some of the most critical ones are as follows:

1.1 Low priority for corridor maintenance

The PIDA review of the physical state of the African Regional Transport Infrastructure Network (ARTIN) shows that finance made available for the operation and maintenance of the transport corridors is generally inadequate with, on average, less than half of the resources needed for maintenance being allocated in the majority of corridors, according to the White Paper on Transport Policy.

With insufficient maintenance funding, corridor assets and services rapidly deteriorate leading to inefficient regional transport services whilst investments required to rehabilitate the infrastructure to its original condition will be substantial.

A coherent maintenance policy is thus critical to the continued and efficient operation of a transport corridor2.

1.2 Public sector dominance negatively affects the efficiency of the transport system

Notwithstanding the fact that a trade corridor transcends several countries, national authorities are ultimately responsible in their own territory for regulating transit and can set their own rules. In reality therefore, the transit corridor chain remains a sequence of independent national procedures even if the objective of regional integration is to create a framework for a single set of procedures along the same transit corridor.

Management of the transport corridor, often by several public agencies, results in numerous administrative inefficiencies. Such has often led to politically determined prices and tariffs, indirect

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2 For instance, it has been estimated that the road network often characterized by insufficient quality and poor maintenance, especially near the borders, could, if rehabilitated, reduce the vehicles operating costs by an increase in the utilization of the truck and a reduction of the damage to trucks, at least for the truck fleet recent and in good conditions (the saving on maintenance expenses becoming inexistent for trucks dilapidated and over-age).
subsidiaries on services and regulatory protection of domestic operators.

With respect to the regulatory framework which is the responsibility of Government, public agencies administer and enforce regulations inefficiently especially in aspects such as vehicle licensing and testing, load control, transport services licensing and safety standards relating to railways, maritime and civil aviation.

1.3 Lack of regulated criteria for authorizing operators to participate in transit operations results in a less efficient transport system

Lax regulations of authorization applicable to transit operators (freight forwarders, customs brokers, truckers) do not bode well for provision of the best services by the transit operators.

Improving their competitiveness and efficiency requires revamping current practices for access to the transit and transport market towards a situation in which operators are recognized based on their compliance with a set access criteria (reliability, professional competence, financial solvency, etc.).

1.4 Freight allocation systems and other limitations on the flexibility of trucks operations

Queuing systems for trucks or “tour de role” for individual truckers which are still very prevalent in Francophone Africa bring costs up, lower service quality and prevent the emergence of organized companies with long term commercial relationship with shippers and freight forwarders.

More generally, the freight allocation system together with the system of road transport permits and trucks quota3 which set the maximum number of permits than can be made available to each county has been used as a way to protecting the transport industry of a country which could not have otherwise survived open competition from foreign transport operators.

All these factors combine to distort allocations between transport modes, inhibit competition, increase costs for users and customers, at the expenses of quality and performance and create a sub-optimal utilization of the transport capacity available due to the low utilization of the trucks4.

1.5 Poor application of the regulatory framework for intra-regional and international trade

Inconsistencies and poor application of the regulatory framework for intra-regional and international trade, transit traffic and procedures at border posts results in difficult trading conditions.

Time consuming customs formalities, multiplicity of documents required, poor management and

---

3 Where bilateral agreements are based on a quota system, the common practice is to fix the number of permits at the same level for both parties. However, if one party has bigger trade volumes or more efficient operators, then it may exhaust its quota faster than the other party. Unless the quota is increased, the party with higher volume must pay for additional permits and access to infrastructure. See Arvis, Raballand, and Marteau (2010)

4 Even if a foreign truck is allowed to its final destination, it will be still prohibited from taking backhaul cargo, obliging it to return empty. Otherwise, long weeks if the trucks is waiting for a return load (less mileage per year means less income and higher fixed cost to be covered on each trip)
corrupt practices result in unnecessary cost increases and uncertainty.

Check points and road blocks organized by the local administrations create the opportunity for informal payment, generate unforeseen expenditures and delay the vehicles. On the other hand, convoys of transit vehicles accompanied by police and/or customs officials tend to be less prevalent nowadays.

Initiation of transit processes is often lengthy especially in ports. The time it takes to initiate a transit process at a port is as long as it takes to clear goods for local consumptions in a coastal country. The simplified nature of transit processing (document, controls and payment) as opposed to local clearance is not always recognized by the authorities.

Lack of efficient information system to control the beginning and completion of the transit procedures is also causing major errors and delays in the discharge of the bonds.

1.6 Costly transport services hamper trade competitiveness

Freight cost, particularly maritime rates, are three times higher in Sub-Saharan African (SSA) countries than in other developing regions with average nominal freight rates 60% higher in West Africa than East and Southern Africa, according to the White Paper. Overall, freight and insurance charges accounted for about 25% of the value of exports from one-third of SSA countries.

Similarly, inland transport costs are twice as high, due to time-consuming port procedures and services, a complexity of documentation masking corrupt practices, and in some countries, insufficient competition between road transporters and transport service providers. Such problems make price predictability difficult, increase cost and throttle competition.

The overall result is that price and cost differentials are much higher in Sub-Saharan Africa than in other developing regions. Consumer prices are higher, export margins and incentives lower making trade less competitive.

1.7 Environmental issues impacting on transport policy

Despite lower vehicle population, pollution levels in some African cities exceed those in developed countries. Motorized traffic, a major polluter, accounts for up to 90% of carbon monoxide and lead emissions, two-thirds of nitrous and hydrocarbon oxides and most of the particulate material in urban areas.

Pollution is further fueled by inadequate enforcement of regulations covering vehicle maintenance, low quality fuels, poorly maintained engines, land-use planning and traffic management. Similarly, operation and maintenance of transport systems insufficiently mitigate the emission levels, noise and dust hindrance, significant in rural areas but much worse in urban areas.

Moving towards environmentally sustainable transport depends on reducing the present causes of

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5 In Africa, the dwell time which refers to the amount of time cargo stays in the port before quitting averages to about 20 days, compared with 3-4 days in most international ports.
6 When using the transit procedure, financial security provided by a bank or insurance company to guarantee the payment of customs duties in case the goods do not leave the country of transit.
environmental impact and mitigating the impact on future development.

1.8 High accident levels

In Africa, road accidents are the second highest cause of death in age groups between 5 to 44 years old, consisting mainly of pedestrians and cyclists with the poor being three times more likely to die in road accidents than those in the middle-income groups.

The resulting economic cost has been estimated to about 1% of GDP. These appalling statistics arise directly from inadequate enforcement of road safety and vehicle standard regulations, and poor driver standards and behavior.

Railway accidents are also more frequent than in developed countries, resulting in passenger injuries, damage to rail, rolling stock and freight.

Reporting of maritime accidents is erratic, except when loss of life is high, and the extent of environmental damage remains largely unknown. These incidents arise from insufficient enforcement of navigation safety and international maritime agreements.

Air transport safety in many African countries does not meet international standards, consequently the accident rate is very high in Sub Saharan Africa.

Making transport more socially acceptable depends on safer transport and travel.

2 Making A Transit Corridor Functional

2.1 Guiding Principles

A functional transit system must address the following issues:

a. Political commitment of national authorities, who are ultimately responsible in their own territories for transit regulation and setting their own rules, to allow transit operations formalized in agreements that can be bilateral or regional and in accordance with international conventions.

b. Coherent maintenance policy which is critical to the continued transport operations along the corridor.

c. Optimizing the use of existing infrastructure and services considering the role and efficiency of the individual transport modes (road, railways, IWT), traffic volumes, relative transit costs and capacity of each mode.

d. Computerized interface and transit information on EDI between national customs clearance systems allowing a seamless customs guarantees discharge mechanism.

e. Private/public partnership between the transportation services (including the trucking industry or the railways operators, customs brokers and freight forwarders) and the national authorities of the transit countries and the countries of final destination (mainly customs but also the other agencies involved in controlling international trade and transportation).
f. Enabling environment to facilitate the movement of vehicles and people, including vehicle regulations, provision of trade in freight services across countries, allocation of visas for drivers, mutual recognition of insurance and integration of the financial sector across countries

g. Facilitating transit regimes defined as the actual provisions and procedures applicable to shipments in transit with the objective to create a framework for a single seamless procedure.

h. Clarification of the status of authorized economic / transit operators (freight forwarder or truckers) and specific incentives (lower guarantee, fast track) for reliable operators associated to the operations in transit. For example, such incentives may include a reduction of guarantees of values and taxes, or be granted “green channel” status or “fast track treatment with minimal delays”.

i. Transit traffic must move freely to improve trade competitiveness. This requires greater regional cooperation for harmonization and simplification of customs, health and immigration procedures by effectively implementing international transit agreements.

2.2 Involving all stakeholders

Continuous dialogue builds confidence and trust, creates ownership in transport systems and more easily provides solutions to stakeholders’ transport needs.

It requires bringing together key stakeholders at country level encompassing government departments, representatives of transport users, chambers of commerce, farmers associations and local communities. Financiers and donors should also be included in this dialogue.

It also requires regional level dialogue between neighboring countries and sub-regional groupings to ensure coordination in such priority areas as regulations governing transit trade traffic, customs and immigration procedures, procedures for handling imports and exports through ports, airports and land border customs stations, infrastructure construction and maintenance standards, problems of landlocked country dependency on transit countries.

Once there is confidence and thrust among the key stakeholders, experience shows that policy reform and mobilizing donor funds for investment are easier.

At the same time coordination of donors is required to establish a coherent approach in their funding with the recipient country leading the coordination because donor procedures and requirements need to be matched to the country’s legal and administrative procedures.

2.3 Securing Finance

A steady flow of funding must be made secured for operating and maintaining the corridor operation and maintenance to avoid a situation where its service level is reduced to match the available level of funds for its maintenance. Because resources are limited, the corridor will have to be operated commercially on a user pays principle basis.
Convincing users to pay is an essential element in achieving sustainable infrastructure. Ways have to be found for increasing the awareness of users and beneficiaries and involving them actively in decision making on corridor related financial planning and management.

Effective pricing of user charges is key to rationalizing transport demand, raising revenue to cover the operating and maintenance costs and to achieving the long term sustainability of the transport corridor through generating sufficient revenue to meet repayments on capital investment and interest.

Getting prices right, particularly relative prices between the transport modes, is critical for an efficient corridor system. A rational pricing policy should aim at reducing and eventually eliminating pricing that distorts and restricts transport demand. Too high or too low prices can lead to inefficient decisions by transport users. Pricing policy, therefore, must be analyzed in conjunction with transport demand.

Social reasons may justify subsidizing transport. However, subsidies should be explicitly targeted at beneficiaries rather than through internal cross–subsidization.

2.4 Developing a commercial approach

Transport needs to be run as a business and this implies redefining the responsibilities and tasks of the public sector involved in transport in order to adopt more private sector business practices, procedures and governance principles.

The most efficient structure would be one which permits that policy and regulation remains the domain of the government while the management, operation and maintenance of the corridors are run more on a commercial basis (autonomous agencies) thus giving opportunity for greater private sector participation.

Governments should move towards the commercialization and eventual privatization of transport’s “private goods” or with strong private goods characteristics, and take a commercial approach to provision of transport’s “public goods” or with stronger public goods characteristics. Private goods cover transport services such as toll roads, rail, port and airport services to which user access is controlled. Rail, port and airport infrastructure, where network access is controlled have strong private goods characteristics. Operating these facilities on a commercially basis and efficiently through credible management and taking into account the reality of the market conditions is essential. Ownership is not the determining factor.

Roads, the principal inland transport mode in Africa, are generally considered as public goods because user access cannot be controlled. Governments operating within the limits of constrained public resources should adopt commercial practices and work with the private sector, providing infrastructure and services, to make the best use of limited resources.

2.5 Optimizing public private partnership

The public sector must build partnerships with the private sector and build synergies around private

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7 Good are private because we can’t get them without paying for them. Other goods are public because we can get them without, in principle, paying for them.
sector expertise in mobilizing finance and managing commercial operations for more effective and efficient transport.

Such partnerships offer greater opportunities for private sector participation in provision of transport services through a range of options such as management contracts, concessions, leases, and build-operate-transfer (BOT) contracts.

Similar commercial approaches can be applied to the management and operation of roads and where market conditions permit, privatizing certain support services.

Increasing private sector involvement means strengthening government capacity on policy, planning, regulation, supervision and monitoring of service delivery by the private sector. This calls for skills in updating the regulatory framework that allows options for private sector financing of transport in order to accommodate different degrees of commercialization from simple contracting out, concessionaire agreements to full-scale privatization.

Updating the regulatory framework will also be required to ensure equitable private sector access to the transport market to allow free competition within and between individual transport modes.

2.6 Optimizing and integrating existing facilities

Optimizing the use of existing infrastructure and services will avoid building overcapacity in individual transport modes.

This requires consideration of the role and efficiency of the individual transport modes, for example, road versus rail or maritime in order to improve the cost effectiveness of the corridor.

It requires harmonizing the regulations and procedures for carrying goods between modes to avoid transshipment delays. Integrating transport modes along principal transit corridors will result in potential operational savings, leading to more efficient transport services.

2.7 Monitoring the evolution of the corridor

Monitoring the development and continuous transformation of the corridor in terms of traffic and its impact on beneficiaries is vital for evaluating past decisions and improving decision-making.

This involves regular surveys and evaluations covering technical, economic and social aspects in order to get relevant and reliable data to facilitate transport corridor decisions.

The benefits of such surveys and evaluations can easily far outweigh the cost when it eventually leads to improved decisions.

2.8 Transit traffic must move freely and rapidly

Landlocked countries (and some island states) face greater difficulties of economic integration than coastal continental countries. These difficulties range from longer haul distances from ports to a dependency on transport policies and procedures of the transit countries. Isolated islands rely more heavily on maritime and air transport, over which they have little control or influence.
In this regard, the following points must be taken into account:

**Transit traffic must move freely to improve trade competitiveness**

For products from a developing country to be competitive, national regulations and documentation will need simplification with regard to road, rail and air transit traffic, customs, health and immigration procedures.

This will require greater regional cooperation for harmonisation of procedures. These measures will also be enhanced by developing transport and trade policies that complement each other.

**Speed of movement must be achieved to increase trade competitiveness**

This can be accomplished by effectively implementing international transit agreements and simplifying procedures for handling of imports and exports through ports and airports, in all countries.

Inland countries must push for better linkages between ports and inland transport, including the elimination of non-physical barriers. Improving documentary procedures and physical linkages in the transport chain will contribute to the desired speed of movement.

2.9 Integrating environmental objectives

Like many other economic activities, the transport sector brings enormous benefits to society, yet it also damages the environment.

The most obvious forms of environmental damage are the visible physical intrusion of infrastructure construction, air pollution from vehicle exhausts often caused by low quality fuel and poorly maintained vehicle engines, noise pollution from aircraft, road and rail generally, visibility impairment due to dust which can be significant in rural areas but much worse in urban areas.

Limiting the impact on transport infrastructure and services and mitigating the impact on future development must be high on the agenda aiming at improving people’s well-being and reducing the risks of accidents.

Addressing the environmental impact of transport along a corridor requires formulating, at national and regional level, environmental policies and regulations in line with international conventions and covering motorized vehicles, railways, marine vessels and aircraft in use.

2.10 Integrating safety objectives

Political recognition must be given to the enormous cost to society of accidents and greater emphasis given to the different transport needs the various stakeholders. Updating regulations is naturally a start, with proper enforcement as a follow-up.

The high road accident rate results from a wide range of interrelated causes. These include, inter alia, the poor condition of road infrastructure, inadequate enforcement of vehicle standards regulation (vehicle loading limit, vehicle maintenance standards) and poor driver standards and behavior. Greater
public awareness is needed as well as an effective enforcement of rules with mandatory enforcement of vehicle maintenance standards and vehicle loading limits.

For railways, the lack of regular track inspection and maintenance by the railways companies and the loading regulations not being respected are major causes of accidents. As for maritime and air transport, the disregard for maritime and air safety standards and regulations is responsible for most accidents. Meeting international safety standards will create public and commercial confidence thus enhancing the competitive nature of these transport modes.

**Safer transport** is usually achieved through better design and maintenance standards in the infrastructure itself and harmonization of transport regulations, standards and procedures complemented by proper enforcement. The wider adoption of international transport recommendations and conventions should be also encouraged.

However, for effectively improving safer transport, a greater awareness is necessary between transport operators and passengers and pedestrians. This therefore requires increased dialogue between governments, transport services providers and the civil society to also identify ways of responding to the safety objective. Education, information and training can also play an important role in raising safety standards awareness.

### 2.11 Integrating social objectives (fight against poverty, rural access to transport, employment, gender issues and health)

The poor in rural and urban communities are generally insufficiently served by transport services. With little influence on provision of transport services, the poor often incur higher travel costs in time and money when seeking access to jobs, education, health and acquiring goods and marketing products. Such constraints thus perpetuate poverty. Unless low cost ways of improving their mobility are found, the fight against poverty cannot be sustained. Rural transport systems dominated by roads, and sometimes inclusive of inland waterways, must meet the needs of the poor living and working in the communities they serve.

Along the corridors, appropriate infrastructure and services have to be identified in consultation with the communities themselves as such communities will often have to maintain them. For example, paving roads is rarely economically viable for the occasional motorized vehicle and the emphasis must be on providing minimum access requirements.

Corridors can also contribute to the development of competitive local construction industries (small and medium sized contractors) in provision and maintenance of transport infrastructure. With simple equipment manufactured and maintained locally, labor-based methods can not only be used in constructing and maintaining gravel and earth roads, but also on certain activities for maintaining paved roads.

Furthermore, contracting out design and supervision services would give road agencies the flexibility to call on external expertise which is too costly to maintain in-house on a permanent basis at public expense. The additional benefit from contracting out is capacity building in the local consulting and contracting industry, which is a prerequisite for local market capacity.
These methods not only create long-term employment, but when correctly applied, can also lower costs. Moreover, capacity building in the local construction industry will, in the long-term, increase competitiveness in maintenance and provision of transport infrastructure.

Corridors can also stimulate the possibility of opening up remote or adjacent regions and change in land-use patterns, thus contributing to their development by reducing the costs of imports and offering new export opportunities.

Finally, the corridor approach can also encourage the emergence of new industries as part of a geographical concentration of enterprises with common challenges and opportunity. (cluster approach).

But while new or improved infrastructure brings economic and social benefit, it can also facilitate the spread of disease. Opening up new traffic routes and improving access and personal mobility can contribute to the rapid spread of communicable diseases such as HIV/AIDS.

3 Recommended Approach to Developing Coherent Transport Corridor Policies

By Francis Chirimuuta

Implementation of various actions as above outlined requires adoption of a coherent approach by the RECs and their respective Member States. The recommended implementation approach involves the following steps:

3.1 Defining and Developing a Regional Transport Corridor Network.

A regional transport corridor being a network of inter-connected national transport networks, RECs in consultation with their member States must define and specify those national transport trunks and routes that shall form part of the regional transport corridor. This needs to be informed by the trade and transport requirements of the region whilst at the same time taking into account the national objectives and transport requirements of each member State.

Having defined the regional corridor network, the RECs and their Member States should proceed to carry out critical assessment of the existing fundamentals of each corridor and determine its developmental needs.

3.2 Assessment of the fundamentals for transport corridor development

In carrying out an assessment of existing corridor situation and development fundamentals, the following should be taken into account and require special attention and critical analysis:

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8 The World Bank has in 2007-2008 undertaken a HIV/AIDS prevention project for the Abidjan-Lagos transport corridor. HIV/AIDS along the corridor remains a major threat to the vulnerable population which benefit from the project (transport sector workers, migrant population, commercial sex workers, local populations living along the corridor, especially at border towns.)
3.2.1 Corridor maintenance

A coherent corridor maintenance policy that defines sustainable sources of funding for regional corridor maintenance and a system that ensures adequate resource allocation for regional corridor maintenance. The policy should include:

a. a mechanism for defining regional corridor maintenance requirements as distinct from national obligation, if any.

b. a mechanism for determining the level of resources required for regional corridor maintenance, prioritisation of work and allocation of requisite resources.

c. definition of the institutional structure to carry out the regional corridor maintenance, which could either be the Member States or independent regional institutions or contracted private sector bodies.

d. parameters for accountability for the state of regional corridor maintenance and utilization of allocated resources.

3.2.2 Harmonisation of objectives

It is critical to ensure that regional objectives in establishing a corridor are synchronized with national objectives of the Member States. This should also include harmonisation of the corridor regulatory frameworks, procedures, institutional structures, inclusive key stakeholder participation and coordinated approach.

3.2.3 Regulated transit operations

This entails the setting–up of a carrier licensing system and standards that define the objectives of the regulatory framework, standards to be complied with by all authorised operators and defines the monitoring and enforcement regime.

3.2.4 Freight allocation systems

For the rationalisation of the freight allocation systems on regional corridors must be made based on a critical analysis of the merits and demerits of a controlled freight allocation system as against one based on market forces. Specific issues that require assessment include transport permit and quota systems, protection of local operators, cabotage and third country rule where such are in existence with respect of their impact on competition, efficiency of the regional corridor, costs of operation, quality of services and optional utilisation of available regional transport resources.

3.2.5 Regulatory framework for regional trade

The extent to which existing regional and international trade regulatory frameworks are being applied within the regional corridor needs to be evaluated. Specific aspects include formalities and procedures at ports and border posts, transit documentation and processes and efficiency of information systems. The aim must be to harmonise national policies to regional and international agreements and to assess
the use of a trade facilitation approach, IBM/CBM at border posts and electronic tracking systems along the corridor.

3.2.6 Transport corridor related costs
A critical analysis of the regional corridor related costs must be carried out in terms of the cost structures, identification of the cost drivers and potential measures that could be taken to eliminate or reduce the costs. Non–tariff barriers within the regional corridor need to be identified and dealt with.

3.2.7 Environmental protection
An assessment of the extent to which existing practices and policies are geared towards protection of the environment must be carried out with a view to addressing issues of levels of the pollution, waste disposal, movement of hazardous goods, quality of vehicles being used for transportation and standards set, disaster recovery plans and systems and other environmentally sustainable transport measures.

3.2.8 Corridor safety
Priority must be given to carry out a corridor safety check that assesses the existence and effectiveness of measures aimed at the avoidance and reduction of accident rates, the reduction of the economic costs of such accidents, enforcement systems and penalties for non – compliance, monitoring and disaster response recovery systems and application/enforcement of international best practice standards and agreements.

3.3 Developing a Functional Regional Transport (Transit) Corridor
It is imperative for the successful development and implementation of a functional regional transport corridor to address the following fundamentals:

- Political will to synchronise national objectives to the regional objectives in establishing the regional transport corridor.
- A coherent corridor maintenance policy.
- Optimal and complimentary usage of existing transport modes.
- Incorporation of smart corridor objectives and characteristics.
- Multi–stakeholder (both public and private sector) involvement and participation.
- Trade facilitation oriented regulatory frameworks
- Regional Transit regime based on a single seamless procedure.
- An AEO programme incorporating segregated traffic clearance channels based on risk management systems.
• Harmonised regulatory frameworks and procedures for transit traffic based on international transit agreements.

The RECs and their Member States shall ensure that the above imperative fundamentals for the establishment of functional regional transport corridor are created and implemented within the following framework:

3.3.1 Smart Corridor concept

This Smart Corridor shall be as defined by the AU in terms of its objectives that include the following:

• Increase the use of real time traffic data and statistical information to optimise use of corridor resources and infrastructures;
• Enhance trade and transport facilitation by:
  ○ Simplifying and harmonizing cross-border administrative procedures and documentation
  ○ Implementing paperless automated administrative procedures;
• Reduce cargo transportation time and costs;
• Increase safety and security of transport services;
• Simplify trade while Increasing Customs authorities control efficiency;
• Ease the opening-up of landlocked countries for intraregional and international trade; and
• Enhance corridor countries competitiveness.

The defining characteristics of the Smart Corridor entail actions along the following five lines:

a. Implementation of cross-border ICT systems
b. Implementation of Intelligent Transport Systems (ITS) equipment and technologies
c. Implementation of the WTO/WCO trade facilitation tools
d. Implementation of REC agreed trade facilitation policies, laws, regulations, procedures and safety measures
e. Implementation of quality transport infrastructure (road, rail, maritime, border crossing, etc.)

3.3.2 Corridor Development Coordination and Management Institutions

These shall be established by the RECs and their member States in terms of the recommended AU model legal framework which provides for the following:

a) the establishment of the CDCMI by the Corridor States and for its composition;
b) the objectives of the Corridor States in establishing the CDCMI;
c) the legal status of the CDCMI;
d) the objectives and functions of the CDCMI;
e) the structure of the CDCMI at regional and corridor levels and a framework for institutional arrangements at individual Corridor State level;

f) the outline of operational and administrative procedures of the CDCMI;

g) the outline of financing arrangements for the CDCMI; and

h) general provisions.

3.3.3 Critical factors in implementing the smart corridor concept and establishing CDCMIs, the RECs and the member States shall pay particular attention to the following factors that will ensure the success of functional regional transport corridors:

a. Involvement and participation of all key stakeholders in the corridor development issues at both national and regional levels. This must be coupled with the establishment of stakeholder institutions that are action oriented with requisite executive powers to make and implement decisions within specified Terms of Reference.

b. Financial sustainability of the corridor especially for corridor development, infrastructure and maintenance purposes based on a commercially determined user pay principle. Effective price modeling is critical to financial sustainability and rationalisation of transport demand between transport modes.

c. Adoption of a commercial approach that ascribes policy definition and regulation to the public sector and management, operation and maintenance of the corridor to the private sector.

d. Optimal public private sector partnerships that ensure increased private sector participation, operation of free market forces and competition between transport modes.

e. Optimal use of existing corridor infrastructure and services in a cost effective manner than ensures integrated transport modes and avoidance of over investment in the capacity of individual transport modes.

f. Conduct of regular, technical, economic and social surveys and evaluations on the impact of the transport corridor decisions on beneficiaries.

g. Simplification and harmonization of transit procedures and elimination of NTBs to allow for free movement of transit traffic and shorter transit time in order to improve and increase trade competitiveness of the transport corridor.

h. Integration of environmental objectives into transport corridor policies in order to minimize the impact of transport corridor operations on the environment. This entails formulation of environmental policies and regulations in line with international conventions at both national and regional levels for all transport modes.

i. Integration of safety objectives that critically addresses the wide range of interrelated causes of accidents on all transport modes. Safer transport is achievable through better design and maintenance standards of transport corridor infrastructure, effective regulatory framework and
enforcement regimes that meet the requirement of international safety conventions. This should be an uncoordinated approach at raising safety standards by all transport corridor stakeholders.

j. Integration of economic and social objectives that take into account the requirements of the poor rural and urban communities served by the transport corridors. Corridor infrastructure and services decisions must involve the corridor communities which must benefit through provision of various contractual services and employment. New opportunities for setting industries along the corridor need to be identified and pursued. Attendant health and other risks inherent in transport corridor development need to be effectively addressed.
MODULE 2

ASSESSING TRANSPORT CORRIDOR PERFORMANCE (*)1

By Philippe Cabanius

Table of Contents

1 Concept of Transport Corridor ................................................................. 2
2 Transport Corridor Physical Components .................................................. 3
3 Assessing and Measuring Corridor Performance .................................... 3
  3.1 Capacity and Physical Condition of Corridor Infrastructure ............ 4
  3.2 Corridor Efficiency and Reliability ...................................................... 5
    3.2.1 Average time and costs ............................................................... 5
    3.2.2 Reliability and Flexibility in services .......................................... 6
  3.3 Measuring Corridor Performance ....................................................... 8
  3.4 Multiple Transit Corridors Versus One Major Transit Corridor .......... 9
4 Recommended Approach To Assessing Transport Corridors Performance .... 10
  4.1 Transport Corridor Concept .............................................................. 10
  4.2 Assessing and Measuring Corridor Performance ............................ 11
  4.3 Corridor Efficiency and Reliability ................................................... 11
  4.4 Sustainable Data Collection and Key Performance Indicators ......... 12
  4.5 Multiple Transit Corridor versus One Major Transit Corridor .......... 12
5 Annex ...................................................................................................... 14

1 (*) see 3 RECOMMENDED APPROACH by Francis Chirimuuta p. 10
As noted in the White Paper Transport Policy, an efficient transport corridor is “essential to improve connectivity within regions, between regions, and between regions and their ports to reduce transport costs and foster regional, inter-regional and world trade. It is the first strategic objective of the White Paper.”

Economic integration will never achieve its full potential without a well-functioning transport system. Well-integrated and efficient intermodal transport corridors are an important pre-requisite.

1 Concept of Transport Corridor

The concept of a transport corridor was first formulated to address the needs of the landlocked countries by providing them with access to the sea or connecting them with adjoining coastal countries to facilitate the movements of freight with the objective of reducing the costs of imports and improving the competitiveness of exports.

Over the years, the concept has evolved from a purely transit problem faced by landlocked countries, to a broader challenge which affects all countries along a corridor. Corridors contribute to opening up remote or lagging regions or to developing clusters of economic activities along the corridor.

Transport corridors also serve the domestic traffic of the transit countries themselves by providing vital links between centers of production and markets in economic sectors such as agriculture, manufacturing industry, mining and tourism.

In Africa, almost all corridors are land-based transport networks and mainly linking landlocked countries with their adjoining transit countries. Only the Dakar-Abidjan-Lagos corridor in West Africa connects coastal countries. Whilst maritime coastal and short sea corridors are less common in practice, such routes could represent important alternative routes between the countries with a maritime façade.

In addition, only a few inland water routes play a significant role in the regional transport system such as the Gambia river, the Niger river which is important for Mali, Niger and Nigeria (with the Benue river), the Congo river and the Ubangi river which is important for the Central Africa Republic, the Democratic Republic of the Congo and the Republic of the Congo. A few navigable lakes are also used by riverine countries such as Lake Tanganyika (between Tanzania, Burundi and Democratic Republic of Congo) and Lake Victoria (between Tanzania, Uganda and Kenya).

<table>
<thead>
<tr>
<th>BOX 1: WHY THE CORRIDOR APPROACH IS INCREASINGLY USED</th>
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<tr>
<td>“Firstly, transport corridors are one of the direct ways to bring about regional integration. Regional integration is important to the growth prospects of middle and low income countries, especially those that are landlocked.”</td>
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</table>

| Secondly, corridors help to prioritize the development of infrastructure to plug existing missing links, especially in developing regions. |

| Thirdly, regulatory and other constraints to trade facilitation obtain a practical relevance at corridor level, enabling the design of appropriate interventions. |
Lastly, corridors provide a spatial framework to organize cooperation and collaboration between different countries and public and private sector agencies involved in providing trade facilitation infrastructure and services”.


A transport corridor can be characterized by either its physical components or its functional dimension.

2 Transport Corridor Physical Components

A corridor can be defined in terms of links interconnected at nodes and beginning and ending at gateways. (see Schematic Transport Corridor models).

Links can be constituted as one or several routes connecting the different centers of economic activities along the corridor up to the hinterland. They can be a single mode corridor such as road or railroad line, and they can also be multimodal corridor with parallel routes using different modes or intermodal corridor with common intermodal connections.

The distinction between single mode, multimodal, or intermodal corridors is somewhat artificial in that most international transport corridors are intermodal and multimodal including parallel routes with different modes.

Rail routes are intermodal when road transport is required at both ends of the movement. Road routes that cross borders can also be treated as intermodal since the border crossing generally acts as a point of transfer between transport services, even though such would be of the same mode.

In fact, with the exception of a road corridor providing connections between adjoining countries, all transport corridors are at minimum intermodal when they include a domestic land mode and an international maritime or air transport mode with airports and seaports serving as international gateways.

Nodes provide connections between links. They are mostly centers of economic activities where cargo is collected from or distributed to the surrounding regions through the domestic transport network. They contribute to the performance of the corridor.

These nodes also include intermodal or multimodal interfaces that increase diversity of routes and facilitate exchange of cargo between modes. These interfaces are primarily rail-yard terminals or trucks terminals usually located at the peripheries of cities of which the most important are Inland Container Depots increasingly being funded by the private sector.

Gateways serve as entry/exit points for the traffic that travels over the links, generated and ending outside the corridor with maritime ports at one end and land border crossings (when transfer from domestic transport services to international services is required) or Inland Container Depot (ICD) as final destinations for transit cargo clearance beyond borders at the other end.
SCHEMATIC TRANSPORT CORRIDOR MODELS

CENTER OF ECONOMIC ACTIVITIES

GATEWAYS

LAND BORDER CROSSING

INLAND CONTAINER DEPOT (ICD) or CONSIGNEE’S PREMISES

INLAND CLEARING DESTINATION

GATEWAYS

INTERMODAL INTERFACE

NODE

GATEWAYS

PORT OF ENTRY

MULTIMODAL INTERFACE

ROAD

RAIL

LINKS

INTERMODAL INTERFACE

LAND BORDER CROSSING

INLAND CLEARING DESTINATION

GATEWAYS

INTERMODAL INTERFACE

NODE

GATEWAYS

PORT OF ENTRY

MULTIMODAL INTERFACE

ROAD

RAIL

LINKS

CUSTOMS CLEARANCE

TERMINATION OF TRANSIT

CHECKING SEALS & TRANSIT CUSTOMS DECLARATION

TRANSFER BETWEEN TRANSPORT SERVICES

TRANSIT CUSTOMS DECLARATION

INITIATION OF TRANSIT
Physical infrastructure is important for road, rail or inland water way transport since they determine the capacity of the transport units and the maximum throughput.

Performance of the links is determined by the frequency of transport services and the size of the transport units. The cost and time for transiting these links are determined by the service providers.

Performance of the gateways is measured in terms of the time and cost to move cargo through the interface assuming that the shipper does not undertake, in addition to transfer between services, other functions such warehousing or processing of cargo.

Regulations are also important to the extent they have an impact on operating costs and efficiency of the corridor.

Poor interconnections, especially difficulties at the border crossings, are the primary problem of most international transport corridors and are further compounded by limitations on infrastructure or lack of maintenance. This is most evident with the corridors in West and Central Africa, despite recent improvements.

Shippers using a corridor may have a choice between several routes, which are constructed from these links. They also determine the number of intermediate locations at which their cargo is loaded and unloaded. Increasing the number of these locations provides access to more cargo origins and destinations, but also increases the time required to transit the corridor and reduce the reliability of service. The performance of individual links is less important than the combined performance of all the links along a given corridor.

For international corridors, the concept of interoperability (and the related term of interconnectivity) refers to the ability of transport units to operate across the countries through which the corridor passes.

Interoperability requires compatibility of transport infrastructure and transport units on both sides of the border. It requires an agreement on a common set of technical standards and engineering practices or an acceptance of those applied by adjoining countries. Railways have greater or lesser interoperability depending on conformance to standards of gauge, signaling communications, loading gauges to mention just a few parameters.

Interoperability also requires harmonizing policies and procedures that would facilitate cross-border movements. Otherwise, it is necessary to perform back-to-back transfers of cargo between transport units at the border. This adds to the costs and time for the crossing and potential losses during cargo handling.

Most of the conditions for interoperability are achieved through bilateral or multilateral agreements when more than two countries are using the corridor.

3 Assessing and Measuring Corridor Performance

The following box summarizes the four objectives of an efficient corridor.
Box 2: TRANSPORT CORRIDOR PERFORMANCE

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
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<tr>
<td>Reduce cost of goods</td>
<td>through reduced transportation, logistic, administrative and documentation costs.</td>
</tr>
<tr>
<td>Reduce total travelling time &amp; increase reliability of service</td>
<td>through simplified Customs process &amp; border crossing facilitation</td>
</tr>
<tr>
<td>Increase trade competitiveness</td>
<td>through less costly imports and more competitive exports</td>
</tr>
<tr>
<td>Promote economic growth within the areas of influence of the corridor</td>
<td>through opening remote regions and developing clusters of economic activities</td>
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Two main factors determine the performance of a corridor:

1. Capacity and Physical Condition of Corridor Infrastructure
2. Corridor Efficiency & Reliability

3.1 Capacity and Physical Condition of Corridor Infrastructure

Most corridors in Africa were developed from existing routes. Investments in new links are relatively rare as well as capital investments for extending transport network to the border.

Capital investment addresses the physical capacity of existing links and nodes in a corridor and the constraints faced by traffic in determining the requirements for additional capacity. Improvements are generally planned on a modal basis. Investment decisions consist mainly of enlarging the width of some sections of the corridor or removing choke points. They provide little insight into the effect of the investment on corridor performance on trade and the underlying problems of efficiency.

However, most of the bottlenecks on corridors occur at the gateways (seaports) and land border crossings hence much of the investment for improving corridors should focus on these two types of facilities.

In the case of seaports and airports, the physical requirements for efficient operations are well understood and the planning techniques are relatively standard throughout the world. Inefficiencies are generally caused by insufficient investment and ineffective management.

Public investment in port infrastructure is justified as a means to support the transit country own foreign trade and to maintain global competitiveness. Transit cargo from other countries uses the same facilities as national import/export cargo and hence does not require additional infrastructure. Instead, it improves the utilization of existing capacity and increases the profitability of the port.

The only problem faced is when customs require isolation of cargos in transit in separate facilities and operations for security purposes. This not only adds to the costs of port operations, but can also reduce overall efficiency. There should be no reason for such segregation of the cargo in transit.

Investments in gateway ports and road and rail intermodal interfaces must be accompanied by the complementary inputs necessary to improve corridor performance and in priority the services that use this infrastructure, such as simplifying procedures and increasing efficiency of transshipment.

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2 There are exceptions, such as Djibouti, where the volume of transit cargo to Ethiopia is much greater than Djibouti’s domestic traffic. Fluctuations in transit cargo can create serious shortage of capacity.
operations which can eliminate many of the bottlenecks.

**Investments in road corridors** should include by-pass villages, climbing lanes, rest stops. Road corridor sections near the borders, generally in the more remote and less developed parts of the country, receive limited attention from national governments as they are reluctant to formalize these connections because of their low traffic volume relative to cost, which should not be the case.

**Investment in land border areas and cross-border connections.** Less attention has been given to the design and operation of land border crossings because borders are usually far from the major urban centers, in locations lacking reliable power and communications and where the Government has limited control and minimal management oversight. As a result, the facilities provided are generally minimal and the performance of customs and other border control agencies is of a lower standard. The on-going program of One Stop Border Posts (OSBPs) should be expedited in order to address these shortcomings.

**For rail border crossings,** the cost of extension of the branch lines between the existing network and the border plus the significant investment requirements in cross-border infrastructure including sidings for inspection, switching of locomotives and reconfiguration of trains are often too high for the expected traffic volume to be carried, especially when such investment must take place simultaneously on both sides of the border.

### 3.2 Corridor Efficiency and Reliability

Capital investments address physical capacity constraints but not the underlying problems of efficiency. The performance of a transport corridor and hence its effectiveness can be evaluated from the **quality of the services** provided for traffic moving along the corridor.

Two parameters can be considered:

- **Average time and cost**
- **Reliability and flexibility**

#### 3.2.1 Average time and costs

For each trade that uses the corridor, there is an average cost and transit time for the complete movement from origin to destination of which only a part may be in the corridor.

The **average time and cost for transport units** moving through the corridor can help in identifying those components of a corridor that would offer the greatest savings if they were improved.

**Performance can be improved by reducing time and cost at specific nodes or along a given link.**

In the case where a corridor is composed of several alternative routes or an intermodal route, it is necessary to measure the performance of each route through an evaluation of each link and node. The evaluation includes the movement across borders and through international gateways.

**In determining performance, costs** are measured in terms of transport costs plus any loss or
damage to cargo while en-route. **Time** is measured as the time to complete all the activities essential for moving from the beginning to the end of the route. This includes the delays associated with the frequency of services and with congestion at the nodes.

A variety of activities can occur at these nodes of which some are required and others discretionary. One required activity is the transfer of cargo between transport units where there is a change of mode (for example, rail to road), type of transport (for example, line haul to distribution), or regulatory requirements (for example, hazardous materials). Another is the inspection of the vehicle and its cargo occurring at the international borders.

The most common discretionary activities occurring at these nodes are storage, intermediate processing, consolidation/deconsolidation, repackaging, and labeling. It is important to exclude these activities when evaluating the performance of a route.

Where there are alternative routes, including modal combinations, the times can be compared. In some situations, the one route may be the fastest over the entire length of the route. In other situations, one service might be faster over certain segments of the route, but not over other segments.

The performance of the services on a route can be improved by reducing time either on the links or at the nodes. **Time on a link** can be shortened by improving infrastructure, better traffic management, or a change in the regulations affecting the use of infrastructure (for example, limits on type of vehicle, speed and frequency of services).

**Time at nodes** can be reduced by introducing new technologies and equipment, improving management of services, simplifying procedures and providing additional facilities to handle the traffic without significant delays.

The value of these improvements for overall corridor performance can then be evaluated. Results are not only useful for determining total time savings in corridor, but also for identifying those components that offer the greatest potential savings in time.

While it may be possible to make a significant reduction in the time at certain nodes, if these nodes do not account for a significant portion of total transit time, then it is better to focus on other nodes where there is larger time savings.

Similarly, certain links may offer the best opportunity for improvement but if the time on that link is small relative to total transit time, then it would be better to focus on other links.

Where there are multiple services on a route, each service can be represented by its average cost and time for transit and different combinations of routes, modes, and services can be represented by the average time and cost for transiting the corridor in order to indicate the best solution for traffic movement through the corridor.

### 3.2.2 Reliability and Flexibility in services

Reliability and Flexibility of services, although difficult to measure, are becoming increasingly
important in evaluating corridor performance.

**Reliability is the variation in transit time** for a specific combination of services and between given nodes/points within the corridor.

The greater the variation, the harder it is to predict transit times and for users to coordinate the sequential activities for the complete movement from origin to destination of which only a part is along the corridor.

Shippers and consignees accommodate this uncertainty by adding slack time to their planned delivery times to avoid missed deliveries. This increases the average order cycle time. An improvement in the quality of a transport service is one that reduces transit time variations, allows shippers/consignees to reduce their slack time, and thus the average order cycle.

The cost of unreliable service can be estimated by considering the direct cost for missed delivery dates. In some cases, the buyer will charge a penalty or refuse to accept the shipment until the price has been discounted. In other cases, the buyer may cancel subsequent orders. The extent of the penalty is related to the impact on the buyer due to missed sales and/or over-storage, as well as the arrival of competing suppliers.

**The importance of reliability** varies for different trades. It is very important for manufacturers with capital-intensive production facilities that must coordinate the shipment of a wide range of inputs from multiple suppliers. It is also very important for just-in-time manufacturers that must adjust output to meet changing orders for the quantity and mix of different products. It has become increasingly important for large-scale retailers and wholesalers who want to achieve a cost advantage by minimizing their inventories in warehouses, in transit, and on their shelves. They accomplish this by reducing order sizes, shortening order cycles, and increasing their requirements for on-time shipments.

A reduction in delivery time may allow a shipper to compete in markets that require shorter delivery times. For example, a reduction in transit time that allows for a decrease in order cycle from two months to one and one-half months allows a shipper to compete in market niches that require more rapid replenishment. In this situation, the benefit to the shipper would be the profits earned from the additional volume shipped to this market niche. A similar but more dramatic impact occurs for trade in perishables where the reduction in transit time allows the shipper to extend the range in which goods can be sold.

For land and air express services, it is becoming increasingly common to differentiate services according to delivery time. A premium is charged for overnight delivery and the rates decrease as delivery time increases. The importance of time is linked not only to the value of cargo, but also to the competitive pressure on order times. Producers with shorter order times can obtain competitive advantage and higher prices for their goods.

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1 For example, the Bangladesh garment industry ships about ten percent of its output by air in order to offer a shorter order cycle and compensate for missed ocean shipments. Airfreight costs about $2,500 per ton to northern Europe, whereas ocean freight plus port charges for containerized cargoes costs about $180 per ton. The reduction in shipping time is twenty to twenty-five days, implying a value of about $100 per day per ton.
In addition, the choice of routes and corridors is less decided by the Governments than by the potential users of the corridors, i.e. the private sector. Their choice will be mainly determined by the reliability of the corridor and connectivity (access to several ports) as much as the transportation costs, as has been highlighted in the previous pages.

This is especially true for exporters/importers, which, except for low-value commodities, by far prefer a route with better connections to markets. Exporters of time-sensitive products (perishable products) or importers of higher value products (electronic products) will prefer to use the port which offers the most effective services, consolidates the most regional trade and has the most frequent shipping connections, such as Abidjan in West Africa or Durban in Southern Africa.

### BOX 3: MALAWI EXPORTERS' CHOICE TO CONNECT MALAWI TO MARKETS

Exporters tend to optimize their supply chains according to their own arbitrage between cost and reliability.

Malawi, a small landlocked economy, provides a good example. Malawi exports tobacco, sugar, tea, cotton, and garments.

Malawi has the choice between five ports: Beira (Mozambique), Nacala (Mozambique), Durban (South Africa), Dar es Salam (Tanzania) and Mombasa (Kenya). These five corridors to the sea have advantages and disadvantages that attract different traders, depending on their commitments, products, and destinations, as well as on the transport cost.

Trading through Durban, South Africa, is the longest and most expensive route but it is also the more reliable route.

Tea exporters from Malawi, will prefer to pay a premium to sell on Mombasa’s auction floor because the large volume of tea (coming from Rwanda, Burundi or the Kivu) attracts more buyers, even though the total cost of transportation to Mombasa is quite high.

The railway to Nacala is the cheapest route to the sea but also the least reliable. Only sugar uses this route (as of 2010), since it is a lower value, non-time-sensitive product that has buffer storage at the port.

Source: Connecting Landlocked Developing Countries to Markets Trade Corridors in the 21st Century The World Bank, 2011

### 3.3 Measuring Corridor Performance

Based on the above, some of the key performance indicators for corridors include:

- traffic volumes
- transport cost
- turnaround time of trucks and wagons
- Port dwell time
- border post transit times
- Variation of all the above times

As most corridors do not have data collection systems in place, it is important to undertake an initial baseline survey focusing on the key variables. The baseline survey can lay the ground for sustainable monitoring of corridor performance. Subsequently, it is also critical
to put in place a sustainable data collection and analysis system. The various stakeholders involved in corridor management should commit themselves to provide data on a continual basis.

Both, the World Bank and the Asian Development Bank (ADB) have developed their own approaches to measure corridor performances.

The World Bank has developed a methodology to measure corridor performance. The Corridor Transport Observatory Guidelines based on lessons and experiences gained from the Corridor Facilitation Program of the African Regional Economic Communities (RECs) and Corridor Management Authorities implemented by the SSATP, is the most recent method to provide “the core performance indicators required for monitoring corridor performance along the entire corridor or along parts of it” (see ANNEX 1)

Other methods for measuring corridor performance have also been developed by the Asian Development Bank and by UNESCAP and are outlined in the following box: (See annex 1 Box 9)

The World Bank has developed Trade and Transport Corridors (TTCs)

<table>
<thead>
<tr>
<th>BOX 4: CORRIDOR PERFORMANCE AND MEASUREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>From a trader’s perspective, corridor efficiency and performance is all about cost, time and predictability associated with the seamless movement of freight along the Trade and Transport Corridors (TTCs)</td>
</tr>
<tr>
<td>Corridor performance depends on a complex combination of factors involving public and private entities (logistics operators, control and enforcement agencies), as well as “hard” (transport infrastructure and facilities), and “soft” (legal and regulatory environment, procedures and practices) components.</td>
</tr>
<tr>
<td>Improving corridor performance requires therefore a good understanding of the obstacles to trade in order to determine the causes for lack of performance and not just the symptoms.</td>
</tr>
<tr>
<td>Then, once the causes for lack of performance are identified, a one-solution-fits-all approach is rarely applicable to such a level of complexity and making the right decision requires obtaining precisely the right information made available at the right time.</td>
</tr>
<tr>
<td>The objective of Corridor Transport Observatories (CTOs) is to help reaching that thorough understanding of the obstacles so that remedial actions be identified and implemented.</td>
</tr>
<tr>
<td>A CTO is primarily an analytical tool that analyses corridor performance in its multiple dimensions. It has been conceived to provide that right information, either as a permanent mechanism anchored to corridor management institutions or as an ad hoc expanded diagnosis into selected aspects of corridor performance, using for instance the diagnosis tools to investigate in detail a specific challenge at the preparation phase of an intervention on a corridor.</td>
</tr>
</tbody>
</table>

3.4 Multiple Transit Corridors Versus One Major Transit Corridor

A critical issue for land locked countries when addressing their access to the sea is to privilege either a single major corridor attached to a hub port or to encourage several alternative transit corridors to reach different sea ports.
UNCTAD has recommended several transit corridors not only to reduce vulnerability to disruption in the transit countries due to natural or human disasters but also to gain some degree of bargaining power by introducing competition between transit neighbors to improve their overall access to the sea. However, notwithstanding that such diversification of competitive access to several sea ports might reduce the land locked country vulnerability and thus reduce trade uncertainties, it is not sure that this strategy could always be a winning one. Generally, LLDCs do not have sufficient volumes of traffic to justify the additional infrastructure required for two or several corridors.

As a result, developing several transit corridors through different transit countries and encouraging active competition between them may not be a practical or a sustainable solution. It may, on the contrary, result in diseconomies of scale in infrastructure and logistic services.

In addition, the marginal bargaining power of a land locked country in its relation with its transit neighbors to push, for instance, for additional investments, is directly related to the volume of trade brought by the land locked country compared to that of the transit country. Or, in general, trade volume of most LLDCs is relatively modest (a few million tons at most) and may not justify an investment effort in the transit country.

As noted in a recent World Bank report, “even if active diversification of corridors could be achieved, it may not have the level of benefits that policies designed to improve individual corridor performance might have. Trade depends on corridor performance, which itself depends on many institutional factors that determine the quality of service delivery on the corridors, such as the transit regime or markets for logistics services. Competition within a corridor is more critical to reducing trade costs than competition between corridors”.

4 RECOMMENDED APPROACH TO ASSESSING TRANSPORT CORRIDORS PERFORMANCE

By Francis Chirimuuta

In assessing transport corridors performance based on the detailed guidelines as outlined in this Sub Action 1.2, the following approach and methodology is recommended for RECs and their member States:

4.1 Transport Corridor Concept

A well-integrated and efficient intermodal transport corridor is a pre – requisite to a functional transport system which is a vital component to full regional economic integration. RECs and their member States need to acknowledge that transport corridors have significantly transformed from providing land locked countries with access to sea ports through transit countries and have become development corridors with clusters of economic activities along the corridor and also provide vital links between production centres and their markets. In assessing transport corridors performance, it is

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4 Connecting Land locked Developing Countries to Markets trade corridors in the 21st Century The World Bank 2011
therefore essential that RECs and their member States understand and approach the concept of a transport corridor in this context.

The physical components of a transport corridor can be defined in terms of links that are interconnected at nodes and begin and end at gateways. Focus should therefore primarily be on critically evaluating the performance of the links, nodes and gateways in terms of their physical infrastructure, regulatory framework and interoperability.

4.2 Assessing and Measuring Corridor Performance

RECs and their member States must measure corridor performance against the following criteria:

- reduction of cost of goods
- reduction in total travelling time and increase in reliability of service
- increase in trade competitiveness
- promotion of economic growth within the areas of influence of the corridor.

The two main determinants of corridor performance are Capacity and Physical Condition of Corridor Infrastructure and Corridor Efficiency and Reliability.

Capacity and Physical Condition of Corridor Infrastructure

In assessing the capacity and physical condition of corridor infrastructure of each mode of transport making up the corridor, RECs and their member States need to:

a. assess current capacity of the links, nodes and gateways and determine the requirements for additional capacity.

b. determine where and the nature of the bottlenecks on the transport corridor especially at ports and border posts.

c. assess the sufficiency of the level of the capital investment in addressing the physical capacity constraints.

d. assess the effectiveness of the management of the corridor infrastructure.

4.3 Corridor Efficiency and Reliability

Corridor efficiency and reliability is about the quality of services measured in terms of the average time and cost of using the corridor and reliability and flexibility of the corridor in use. In assessing corridor efficiency and reliability, RECs and their member States need to do the following:

a. Average time and cost
   - compute time and cost related to each link, node and gateway.
   - analyse each in terms of its drivers
   - identify components that can be improved and potential measures to achieve the greatest impact.
In assessing average time and cost, focus should be on those aspects that offer the greatest potential time and cost savings. This includes links, nodes and gateways. A comparative analysis should also be carried out where a corridor consists of a combination of different routes, modes and services.

b. **Reliability and Flexibility in Services**

- analyse the consistency levels of transit time and cost for each link, node and gateway.
- Compute the variances of each link, node, gateway and corridor as a whole.

A comparative analysis should also be carried out where a corridor consists of a combination of different routes, modes and services. The higher the variation, the greater the level of uncertainty and unreliability of the corridor and vice versa.

### 4.4 Sustainable Data Collection and Key Performance Indicators

RECs and their member States must put in place sustainable data collection and analysis systems that commit the various stakeholders that manage and utilise the corridor to providing the data on a continuous basis. The setting – up of the systems must be preceded by the RECs and their member States undertaking an initial baseline survey focusing on the key variables and performance indicators that include the following:

- traffic volumes
- transport costs
- turnaround times of traffic
- dwell times at gateways
- transit times on links and at nodes
- variations of all the above.

The baseline survey data results would form the basis for sustainable monitoring of corridor performance and measurement of the success or failure and impact of initiatives and measures for corridor performance improvement. Corridor Transport Observatories and ITS/ICT systems in the context of the smart corridor concept are recommended tools for corridor performance monitoring which must be set – up and utilised by RECs and their member States.

### 4.5 Multiple Transit Corridor versus One Major Transit Corridor

In determining whether to invest in several alternative transit corridors or one major transit corridor serving a region, RECs and their member States need to assess and take the following into consideration:

3.4.1 the degree of vulnerability of the regional transport system to major disruption as a result of natural or human disasters.
3.4.2 the existence, capacity and state of alternative routes that can be utilised to circumvent the disruption.

3.4.3 the levels of regional traffic volumes as against the costs for a multi – corridor investment.

3.4.4 the impact of economics or diseconomies of scale in infrastructure and logic services of each of the alternatives.

3.4.5 the need and justification for an LLCD to invest or commit resources in developing the corridor or corridors in the transit countries and the level of such investment or resources and potential benefits derivable therefrom.

3.4.6 the likely effectiveness of creating competition within a single major corridor as against creating competition between corridors in reducing trade costs.
5 **Annex**

**BOX 1: The World Bank Corridor Transport Observatory Guidelines**

<table>
<thead>
<tr>
<th>1. <strong>Trade Volumes indicators</strong> (Expressed in tonnage and/or vehicle counts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For different types of trade flows: 1). Maritime trade to/from the transit country; 2). Maritime trade through the transit country to/from other countries. 3). Intra-regional trade between neighboring countries; 4). Domestic trade within both the transit country and the hinterland countries.</td>
</tr>
<tr>
<td>Differentiation between main cargo type: i) containerized goods; ii) general cargo; iii) liquid bulk and dry bulk for maritime trade,</td>
</tr>
<tr>
<td>Differentiation by mode of land transport when multimodal options exist and by type of vehicles (intra-regional or domestic trade).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. <strong>Time indicators</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure the duration of critical stages along the corridor: total transit time (also named lead time) defined as the total time between the discharge of the cargo and its delivery at the final inland destination for import cargo, or from acceptance by carrier up to loaded on board of a ship for export cargo.</td>
</tr>
<tr>
<td><strong>Total transit time must be assessed by route, from origin to destination, and by modal combination.</strong></td>
</tr>
<tr>
<td>In addition to measuring time for the movement of cargo, measuring the time for the movement of carriers (ships, trucks, and wagons). Idle time being a critical parameter for transport costs.</td>
</tr>
<tr>
<td><strong>Port times</strong></td>
</tr>
<tr>
<td>Measure the time between the unloading operations from the ship until the trucks loaded at the terminal can leave the port gate.</td>
</tr>
<tr>
<td>Custom clearance process also measured from the submission of the declaration until the issuance of the release order as ending point.</td>
</tr>
<tr>
<td><strong>Inland transport time</strong></td>
</tr>
<tr>
<td>Measure the transport time (physical movement of freight from the gateway port to inland destinations) plus the time spent for transit regime documentation process (border crossing, check points, and so on).</td>
</tr>
<tr>
<td><strong>Final clearance time</strong></td>
</tr>
<tr>
<td>Measure the time between the arrival of the vehicle at the final clearance area (dry port, shippers’ premises or entry border) and the exit of the goods after Customs has issued the release order;</td>
</tr>
<tr>
<td>Documentation process measure the time between submission of the final clearance declaration and the issuance of the release order.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. <strong>COST AND PRICES INDICATORS</strong> (approach by functions, identifying who pays what and to whom).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total price paid for what is called logistic services by the trader (or shipper) from ship to final delivery, for different types of shipment on the corridor (40’ container with return of the empty container to the port;</td>
</tr>
</tbody>
</table>
break-bulk cargo, etc.). Breakdown includes: Logistics services = Gateway + Inland transport + Final clearance

Gateway fee: Customs fees, Logistics operators’ administrative fees: (Clearing fees, Shipping agent, demurrage for overstay), etc., Cargo handling charges

Transport charges: Trucking (or railways) services corresponding to the movement of the goods from the port area to the country of final destination with stop at the customs border ports. Border clearance agents’ fees for processing the documentation at the border.

Final Customs clearance (according the conditions of the terminal delivery): either direct clearance at the border or direct delivery to the importers after a mandatory passage through an Inland Container Depot (ICD) (with handling fees charged by the ICD for offloading the main haul truck and reloading the goods on the delivery truck).

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**BOX 2: UNESCAP & ADB CORRIDOR PERFORMANCE MEASUREMENT**

<table>
<thead>
<tr>
<th>UNESCAP TIME /COST/DISTANCE (TCD) METHODOLOGY</th>
<th>ADB/ CAREC CORRIDOR PERFORMANCE MEASUREMENT AND MONITORING (CPMM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCD methodology measures the time and costs involved in transportation and analyzes transport inefficiency and bottlenecks.</td>
<td>CPMM evaluates corridor performance from both physical and nonphysical (operational and procedural) standpoints.</td>
</tr>
<tr>
<td>It lays out the cost and time components of the door-to-door movements of a vehicle on a transport corridor, and tracks delays at borders and other inspection points along the corridor.</td>
<td>The physical evaluation deals with the condition of corridor infrastructure (including vehicles and cargo handling equipment) and its used,</td>
</tr>
<tr>
<td>The minimum amount of information needed is the route from origin to destination, including border crossings, the mode of transport for each leg of the trip, the distance traveled, and the travel time and cost of each leg or mode of transport.</td>
<td>The nonphysical evaluation examines the service factors that affect the time and cost of moving goods from origin to destination. The nonphysical evaluation offers more insights into the trade facilitation issues, and allows the performance of corridors of similar length or characteristics to be compared.</td>
</tr>
<tr>
<td>TCD data are typically collected through brief telephone interviews with either a freight forwarder or a transport operator engaged in such transit activities.</td>
<td>CPMM takes two main forms: (i) the monitoring of corridors in their entirety; and (ii) the detailed monitoring of specific locations or predetermined bottlenecks, typically at border crossings</td>
</tr>
<tr>
<td>The UNESCAP TCD methodology is easy to use because it (i) provides a visual snapshot of the situation; (ii) tracks changes over time; (iii) allows comparison of alternative routes; (iv) is easily understood by all, including policy makers and transport operators; (v) serves as a powerful instrument for international cooperation.</td>
<td>CPMM defines a comprehensive list of possible activities pertaining to border clearance inspections and other inspections along the corridors, and seeks to quantify the time delays and costs of each activity. In addition, CPMM includes data collection to gauge the extent of unofficial payments. CPMM collects concrete and well-defined data to quantify each indicator (and not perception of respondents which could be subjective). Besides the distance, time, and cost</td>
</tr>
</tbody>
</table>
of a shipment, data such as tonnage carried, use of TIR carnets, and other key details are collected.
All CPMM data for road transport come directly from the truck drivers. CPMM relies on the drivers who transport the shipments across borders, and who are therefore the best qualified to describe the transport and border-crossing issues and challenges along the CAREC corridors.
After data have been collected over a long period, seasonal and cyclical patterns can be traced with the help of time series studies.

The four stages of CPMM: Stage 1: Data Collection; Stage 2: Data Aggregation; Stage 3: Data Analysis; Stage 4: Data Reporting.

CPMM is by far the most comprehensive measurement instrument available, but also the most time consuming;

CPMM is a joint effort of four groups of stakeholders: (i) drivers and freight forwarders; (ii) national carriers and forwarders association; (iii) international consultants; (iv) the ADB CAREC Trade Facilitation secretariat.

MODULE 3
ENSURING SUSTAINABILITY & GOOD GOVERNANCE ¹ (*)
By Philippe Cabanius

Table of Contents

1 Definitions ........................................................................................................................................ 3
   1.1 Defining Sustainability in Transportation ................................................................. 3
   1.2 Defining Good Governance ......................................................................................... 3
2 The European Union Strategy for Reaching Sustainability ................................................ 5
3 A Framework of Principles for Reaching Sustainability & Good Governance ............... 7
   3.1 Economic sustainability ............................................................................................... 8
   3.2 Financial Sustainability ............................................................................................... 8
   3.3 Institutional sustainability ........................................................................................... 9
   3.4 Environmental and ecological sustainability ............................................................ 10
      3.4.1 Update regulations and improve monitoring ...................................................... 10
      3.4.2 Reduce vehicle emissions and use non-motorized transport .............................. 10
      3.4.3 Make the polluter pay ....................................................................................... 11
   3.5 Safety and social sustainability .................................................................................. 11
      3.5.1 Improve road and rail safety ............................................................................... 11
      3.5.2 Meet international standards for safety at sea and in the air ............................... 11
      3.5.3 Create job opportunities and tackle redundancy and unemployment .............. 11
      3.5.4 Improve intermediate transport ......................................................................... 12
4 Framework for Indicators of Transport Sustainability .................................................... 12
5 Recommended Approach to Ensuring Sustainability and Good Governance in Transport Corridors ...................................................................................................................... 13
   5.1 Defining Sustainability in Transportation ................................................................. 13
   5.2 Defining Good Governance in Transportation .......................................................... 14
   5.3 Principles for Attaining Sustainable Transport and Good Governance ............... 14

¹ see 5 RECOMMENDED APPROACH by Francis Chirimuuta p. 12
5.3.1 Economic sustainability................................................................................................. 14
5.3.2 Financial sustainability.................................................................................................. 15
5.3.3 Institutional sustainability ............................................................................................ 15
5.3.4 Environmental and ecological sustainability ............................................................... 15
5.3.5 Safety and social sustainability ..................................................................................... 15
5.4 Indicators of Transport Sustainability............................................................................... 16
6 Annexes ...................................................................................................................................... 17
1 Definitions

1.1 Defining Sustainability in Transportation

In 1966, the World Bank raised for the first time the issue of “sustainable transport”: “Transport is central to development. Without physical access to jobs, health, education and other social amenities, the quality of life suffers; without physical access to resources and markets, growth stagnates and poverty reduction cannot be sustained”\(^2\).

The World Bank identified three types of “sustainability”:

- **Economic and financial sustainability** requires the resources to be used efficiently and the assets to be maintained properly. The objective is to increase the responsiveness of transport supply to users’ needs by creating competition and by enhancing users’ participation.

- **Environmental and ecological sustainability** requires that the external effects of transport be taken into account. The objective is to ensure that environmental issues are addressed as an integral part of transport strategy formulation and project design through actions that are cost effective.

- **Social sustainability** requires that that the benefits of improved transport reach all layers of the community. The objective is to increase the social sustainability of transport by explicitly making poverty reduction and social development an integral part of national and local strategies.

Since then, sustainability has received a greater recognition. Hundreds of definitions exist.

The most widely used definition comes from the so called Bruntland Commission: “sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”\(^3\).

**One key feature of sustainability is the intergenerational equity:** sustainable development stands for meeting the needs of the present generations while respecting the needs of future generations – in other words, a better quality of life for everyone, now and for generations to come.

1.2 Defining Good Governance

Almost all major development institutions promote good governance as an important part of their agendas. Despite this consensus, “good governance” means different things to different organizations.

In general, for the World Bank and other multilateral development banks, good governance addresses economic institutions and public sector management and aims at transparency and accountability, regulatory reforms and public sector skills and leadership and a “fundamental willingness to do the right things that enable a government to deliver services to its people efficiently” (Gisselquist, 2012).

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Other organizations, like the United Nations, European Commission and OECD are more likely to highlight democratic governance and human rights, and associate the governance quality with the level of citizens’ participation, transparency, accountability, rule of law, effectiveness and equity (OECD, 2006).

Various donors include under their governance programs election monitoring, political party support, combating corruption, building independent judiciaries, security sector reforms, improved service delivery, transparency of government accounts, decentralization, civil and political rights, and the stability of the regulatory environment for private sector activities (including price systems, exchange regimes, and banking systems). Good governance is for instance defined by USAID as a “competent management of a country’s resources and affairs in a manner that is open, transparent, accountable, equitable and responsive to people’s needs” (USAID, 2000).

The question of “how to improve governance” is of course the most pressing from a policy perspective. However, this question cannot be comprehensively answered without simultaneously characterising the concept of good governance: “how to improve what exactly?”

“Good governance has 8 major characteristics. It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society.”

<table>
<thead>
<tr>
<th>Good Governance: Eight Major Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability: Accountability is a key requirement of good governance. Not only governmental institutions but also the private sector and civil society organizations must be accountable to the public and to their institutional stakeholders. Who is accountable to whom varies depending on whether decisions or actions taken are internal or external to an organization or institution. In general, an organization or an institution is accountable to those who will be affected by its decisions or actions. Accountability cannot be enforced without transparency and the rule of law.</td>
</tr>
<tr>
<td>Transparency: Transparency means that decisions taken and their enforcement are done in a manner that follows rules and regulations. It also means that information is freely available and directly accessible to</td>
</tr>
</tbody>
</table>

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4 Rachel M. Gisselquist “Good Governance as a Concept, and Why This Matters for Development Policy” (March 2012) United Nations University – World Institute for Development Economic Research UNU-WIDER
those who will be affected by such decisions and their enforcement. It also means that enough information is provided and that it is provided in easily understandable forms and media.

<table>
<thead>
<tr>
<th>Rule of law: Good governance requires fair legal frameworks that are enforced impartially. It also requires full protection of human rights, particularly those of minorities. Impartial enforcement of laws requires an independent judiciary and an impartial and incorruptible police force.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participatory: Participation by both men and women is a key cornerstone of good governance. Participation could be either direct or through legitimate intermediate institutions or representatives. Participation needs to be informed and organized. This means freedom of association and expression on the one hand and an organized civil society on the other hand.</td>
</tr>
<tr>
<td>Responsive: Good governance requires that institutions and processes try to serve all stakeholders while balancing competing interests in a timely, appropriate and responsive manner.</td>
</tr>
<tr>
<td>Equity and inclusiveness: A society's well-being depends on ensuring that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society. This requires that all groups, but particularly the most vulnerable, have opportunities to improve or maintain their well-being.</td>
</tr>
<tr>
<td>Effectiveness and efficiency: Good governance means that processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal. The concept of efficiency in the context of good governance also covers the sustainable use of natural resources and the protection of the environment.</td>
</tr>
<tr>
<td>Consensus oriented: There are several actors and as many viewpoints in a given society. Good governance requires mediation of the different interests in society to reach a broad consensus in society on what is in the best interest of the whole community and how this can be achieved. It also requires a broad and long-term perspective on what is needed for sustainable human development and how to achieve the goals of such development. This can only result from an understanding of the historical, cultural and social contexts of a given society or community.</td>
</tr>
</tbody>
</table>

Source: Rachel M. Gisselquist “Good Governance as a Concept, and Why This Matters for Development Policy”

2 The European Union Strategy for Reaching Sustainability

A definition of “sustainable transport” was adopted by the Ministers of Transport of the 15 European Union countries in 2001. It has received general political acceptance globally.

“A sustainable transport system [is] defined as one that

- allows the basic access and development needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations;
- is affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development;
- limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and, uses non-renewable resources at or below the rates of development of renewable substitutes while minimizing the impact on the use of land and the generation of noise.”

5 The definition is contained in a resolution entitled “Strategy for Integrating Environment and Sustainability Development into the Transport Policy” – also known as the April Resolution – adopted by the Ministers responsible for Transport and Communications in Luxembourg April 4-5, 2001.
In addition, the European Commission has made the principles of sustainable transport the cornerstone of its transport policy for the European countries as well as in its partnership with other regions and in priority, the ACP countries.

In 2000, the European Commission approved a new transport policy that sets out Policy Guidelines for Promoting Sustainable Transport in developing countries that foster economic growth, increase people’s access to education and health, integrate countries into the world economy and improve the well-being of the poor6.

- Stakeholders must be put first. They need safe, affordable and efficient transport that has a minimal negative impact on the environment.
- To be effective in the fight against poverty, transport must be safe for all and provide mobility, offer equitable services and opportunities for men and women and focus on the poor.
- The policy must encourage greater transport efficiency by emphasizing optimal use of existing facilities and the need for public-private partnerships, with Government taking a more supervisory and regulatory role.
- Maintenance should play a crucial role. To foster sustainable economic and social development, transport must receive its proper share of the national budget.

A comprehensive implementation strategy was outlined to deliver sustainable transport, which is “economically, financially and institutionally sustainable as well as environmentally sound, safe and socially aware”7.

**Economic sustainability:** to maximize economic efficiency and minimizes economic costs. It requires balanced public expenditure, fair competition and rational pricing of services.

**Financial sustainability:** to rely on increasing private sector participation in railways, maritime and inland ports and airports and securing sufficient revenues for road maintenance.

**Institutional sustainability:** to call for more autonomous railways, ports and airports to allow commercialization and eventually privatization of operations. Roads management has to adopt commercial practices.

**Environmental and ecological sustainability:** to address the external effects of transport by limiting emissions and waste that pollutes air, soil and water; to recycle natural resources used in vehicles and in infrastructure (such as steel, plastic, etc.); to limit noise intrusion below levels accepted by the communities; and to encourage use of clean vehicles.

**Social sustainability:** to provide equity of access for people and their goods; to ensure that the benefits of improved transport reach all layers of the community; to explicitly make poverty reduction and social development an integral part of regional, national and local transport strategies.

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6 Poul Nielson, Commissioner for Development Co-operation and Humanitarian Aid – Brussels 6 July 2000
The following box summarizes the main recommendations developed by the European Commission.

<table>
<thead>
<tr>
<th>Box - EU STRATEGY FOR REACHING SUSTAINABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economically balanced</strong></td>
</tr>
<tr>
<td>• Prioritize finance for transport modes correctly in public expenditure</td>
</tr>
<tr>
<td>• Support fair competition for rational pricing of services</td>
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<tr>
<td>• Target subsidies at beneficiaries where necessary</td>
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<tr>
<td><strong>Financially sufficient</strong></td>
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<tr>
<td>• Railways must focus on core rail business and contract out to the private sector</td>
</tr>
<tr>
<td>• Maritime and inland ports, airports and air traffic services must use private operators</td>
</tr>
<tr>
<td>• Secure sufficient revenue for road maintenance</td>
</tr>
<tr>
<td><strong>Institutionally commercially minded</strong></td>
</tr>
<tr>
<td>• Reform the public sector</td>
</tr>
<tr>
<td>• Commercialize the management of railways</td>
</tr>
<tr>
<td>• Grant autonomy to ports and airports authorities</td>
</tr>
<tr>
<td>• Adapt commercial practices for managing roads</td>
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<tr>
<td>• Privatize road management and maintenance</td>
</tr>
<tr>
<td><strong>Environmentally sound</strong></td>
</tr>
<tr>
<td>• Update regulations and improve monitoring</td>
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<tr>
<td>• Reduce vehicle emissions and use non-motorized transport</td>
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<tr>
<td>• Reduce pollution by easing congestion in urban areas</td>
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<tr>
<td>• Make the polluters pay</td>
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<tr>
<td>• Modernize aircraft fleet</td>
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<tr>
<td><strong>Safety conscious and socially aware</strong></td>
</tr>
<tr>
<td>• Improve road and rail safety</td>
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<tr>
<td>• Meet international standards for safety at sea and in the air</td>
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<tr>
<td>• Create job opportunities and tackle redundancy</td>
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<tr>
<td>• Improve intermediate transport</td>
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</tbody>
</table>

In addition, for the European Union, this strategy must be followed by five management (or good governance\(^8\)) principles: leadership, precautionary principle, consultation and public participation, transparency, accountability.

3 A Framework of Principles for Reaching Sustainability & Good Governance

In planning for transportation and other transport infrastructure systems, the concepts of “sustainable transportation and good governance” are now widely adopted by most transportation organizations at country level as part of their mission statement\(^9\).

Consequently, a framework of principles can be designed for all networks (road, railways, river, ports and airports – as well as the services facilitating movement of goods and people), which includes

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\(^8\) Governance means the process of decision making and the process by which decisions are implemented (or not implemented).

\(^9\) See for Instance “Mission Statements of Various Departments of Transportation in Canada & United Kingdom “in annex one.
common development for transport, as well as principles for fostering economic and social development, integrating African economies at regional and continental levels and eventually into the world economy.

3.1 Economic sustainability

i. Prioritize finance for transport mode along the corridor

Economic sustainability relies on reviewing the financial needs of the transport corridor. Such review covers regular appraisal of the corridor development, coordination between and use of individual modes, and maintenance planning. The exercise must ensure that maintenance has priority and investment is correctly prioritized to meet the needs of the economy and society, thus defining a medium term strategy for financing the transport corridor.

ii. Support fair competition for rational pricing of services

With public and private operators often involved in offering transport services it is vital that fair competition exists for pricing of freight tariffs and passenger fares between transport modes along a corridor. This is particularly important between rail and road where underpricing roads distorts demand while unrealistic charges may accelerate the decline of the railways. Regular review of the pricing of tariffs and fares are necessary to ensure fair competition.

iii. Targets subsidies at beneficiaries where necessary

Governments must tackle the issue of subsidies so the target group reaps the desired benefits. It can be the case, for example, with long distance passengers trains which may not be commercially viable if passengers cannot afford to pay the fares needed for full-cost recovery, the service may still have to be continued to meet a social need.

In all cases, subsidies must be well targeted to avoid inefficiency and waste that can often occur when subsidies abandon commercial principles.

3.2 Financial Sustainability

Financial sustainability means securing sufficient finance, and using the funds efficiently. Adopting a more commercial approach, increasing private sector participation and introducing more privatized services should raise the operational efficiency of transport, support better maintenance and deliver benefits to stakeholders. The principal actions necessary are:

**Railway** must focus on core rail business, divesting non-rail business and contracting more services out to the private sector (ballast supply, track repair and maintenance). The next stage is long-term concession agreements, generally to a single company, of core rail services, rolling stock and infrastructure maintenance as is now happening, for example, in Burkina Faso, Côte d’Ivoire, Cameroun, Mozambique and Malawi.

**Maritime and inland ports, airports and air traffic services** must use private operators for cargo/baggage handling, and other related services. Berth leasing must be further encouraged. Revenue from privatization and charges levied on users and applicants, accruing to airport and air
traffic management authorities, must finance the relevant services as well as raising adequate finance for infrastructure maintenance.

**Secure sufficient revenue for road maintenance:** Road agencies must be encouraged to raise revenue on a fee-for-service basis, such as a road maintenance levy on fuel. Raising revenues is just the beginning. Transparent management is crucial to ensure road conditions are improved. One way forward is the establishment of a dedicated road fund, governed by a management board that includes significant private sector representation. Some of the African countries operating road funds include Cameroun, Ethiopia, Ghana, Malawi, Sierra Leone and Zambia.

### 3.3 Institutional sustainability

Provision of transport is no longer solely in the public domain as it is being shared with the private sector through commercialization, privatization, and public-private partnerships. Railways, ports and airports are already providing opportunities for commercialization of certain operations and services. Institutional sustainability requires that, as a general principle, policy and regulation must remain in the Government domain, with steady commercialization and privatization of management, operations and maintenance of infrastructure and services.

#### 3.3.1 Public sector

needs to be reformed. The first stage must be to clarify the responsibilities and tasks of different and often overlapping agencies involved in transport. Sharing responsibility for transport operations with autonomous agencies or the private sector will enhance institutional integrity with the government to focus on policy, planning and regulatory functions. Such areas include options for privatizing infrastructure construction and maintenance, competition policy in respect of haulers licensing, vehicle testing and loading control, and all areas which, even if contracted, will remain subject to Government regulation. Thus adopting more commercial management practices and increasing accountability will raise the standard of services to the public.

#### 3.3.2 Railways

corporations must adopt a more commercial approach to become more competitive, particularly against roads. If customers’ needs are not met, the railways share of traffic will decline leaving no option but to close. Thus, commercial practices must be introduced to improve the quality of services. A viable route may well be public-private partnerships.

#### 3.3.3 Ports and airports authorities

need to become fully autonomous in terms of tariffs, charges, labor recruitment in order to survive and prosper in an increasingly competitive trade environment, supported by sound commercial management and an increasing private sector participation in operations as it is the case in Mozambique, Kenya, Namibia, and other countries.

#### 3.3.4 Road

as “public goods” will remain more in the public sector while road transport remains at all levels a private sector service. However, commercialization of roads management is a necessary pre-requisite for the roads sector sustainability.

Roads management requires adopting commercial practices. The road corridor should have a clear designated corridor management authority. The next step will be to match resources and authority to enable managers to perform effectively. Whether managed by the public sector or autonomous agencies, the responsible agency must adopt commercial practices and systems, particularly in
management, accounting and auditing. This is vital for an efficient road corridor and transport services along the corridor.

Contracting out services and works to the private sector is proving, in most cases, to be more cost-effective and to produce better quality results than when using government-employed and supervised labor. The additional benefit from contracting out to the private sector is the capacity building that takes place in the local community consulting and contracting industry, which is a pre-requisite for institutional sustainability.

3.3.5 Road Transport faces many challenges to become an effective and competitive mode of transport: (i) The transport sector (carriers and transport intermediaries) is unorganized and atomized (small entities, informal sector, multiple actors…); (ii) In many countries, absence of a representative professional federation but proliferation of small syndicates (no interlocutor for Government, no dialogue, low priority of road transport in the development policy); (iii) Lack of qualification and of professionalism of the operators due to the lack of conditions and criteria to access the profession in most countries or when they exist, such are not implemented.

3.4 Environmental and ecological sustainability

Moving towards environmentally sustainable transport depends on reducing the present causes of environmental impact and mitigating the impact of future environmental risks on the ecosystems. Tackling air and noise pollution from road, rail and air traffic must be combined with the use of intermediate and non-motorized transport to meet the different needs of people in rural areas.

There is need to take a proactive approach to developing environmental mitigation measures for minimizing the direct impact of transport as well as measures to enhance environmental benefits, such as phasing out the use of leaded fuel, improving vehicle maintenance, traffic management schemes and city by-passes.

3.4.1 Update regulations and improve monitoring

Addressing many of the fundamental problems is likely to start with integrating international environmental standards in transport policy. This means updating existing traffic regulations covering all transport modes and strengthening transport planning to take into account environmental impact concerns.

Assessment must go beyond project level environmental impact assessments (EIAs) and take account of the impact on land resources and changes in land-use patterns caused by the migration of people and economic expansion that arises from improved transport infrastructure and services.

3.4.2 Reduce vehicle emissions and use non-motorized transport

To set and enforce minimum standards is often the crux to reducing vehicle emissions. This means, for example, obliging mandatory regular vehicle and aircraft testing as well as more direct measures such as the use of lead-free petrol.
3.4.3 Make the polluter pay

Introducing emission charges should always remain a medium-term goal. However, until such simple and effective systems are put in place, most countries will use fuel taxation as a surrogate measure. With the cost of fuel in developing countries, on average, half that of the industrialized nations, there is a considerable margin for controlling the environmental impact of motorization. Therefore, the most practical option is still to charge vehicle operators through differentiated vehicle licenses (based on size and age) and higher fuel prices.

3.5 Safety and social sustainability

It is vital that safety is a priority for reducing the appalling high social and economic costs of road accidents. Similarly, air, river and maritime safety can no longer be neglected.

Transport should also provide opportunities for men and women by meeting their specific transport needs and increasing job opportunities.

Making transport more socially acceptable depends on safer transport and travel, promoting intermediate transport, improving employment opportunities and meeting the different needs of people in rural and urban areas.

3.5.1 Improve road and rail safety

Greater public awareness is needed as well as an effective enforcement of rules: Improving driver behavior, mandatory enforcement of road vehicle maintenance standards and loading limits; Railways companies must carry out regular track inspection and maintenance by the railways companies and loading regulations must be respected.

3.5.2 Meet international standards for safety at sea and in the air

Accidents in coastal waters can be prevented by implementing measures to improve the availability and reliability of the aids to navigation.

Ports authorities need to live up to the standards set by the International Maritime Organization (IMO).

Similarly, air safety hinges upon adhering to international standards, ranging from air traffic control and communications to aids for navigation, laid down by the International Civil Aviation Organization (ICAO).

Meeting international safety standards will create greater public and commercial confidence in air and maritime travel, thus enhancing the competitiveness of these two transport modes.

3.5.3 Create job opportunities and tackle redundancy and unemployment

Increasing private sector involvement in transport management and operations needs to create more jobs as the public sector withdraws. Jobs are required at all levels, but the greatest need is among the semi-skilled and unskilled labor force. Small and medium sized contractors, therefore, need support and training including the use of labor-based methods.
Dealing with public sector downsizing, particularly where over manning has been extensive will require careful social management to ameliorate social hardships that come with such redundancy and resultant increased unemployment levels.

3.5.4 Improve intermediate transport

Improving the availability of intermediate transport would benefit men and women especially in the productive local communities. Its use would reduce the time for moving agricultural inputs and products, facilitate access to local markets and reduce the burden of water and firewood collection. Reaping the full benefits of intermediate transport means, in particular, promoting its greater use by women.

4 Framework for Indicators of Transport Sustainability

Several frameworks are found in the literature for measuring progress towards sustainability in transportation.

The following has been developed by the European Union in the EU 2000 Transport and Environment Mechanism (TERM).

The Transport and Environment Reporting Mechanism (TERM) was set up at the request of the EU transport ministers in 1998 by the European Environmental Agency. The main aim of TERM is to monitor the progress and effectiveness of transport and environment integration strategies through the environmental performance of transport. The results of the monitoring are presented in the EEA’s annual TERM report, which tracks the environmental performance of transport in EU member States.

The TERM indicators cover the most important aspects of the transport and environment system. They represent a long-term vision of the indicators that are ideally needed to answer the above aspects. However, some of the most interesting indicators are no longer examined because of insufficient data. Performance assessment is mainly based on indicators for modal split and sectoral emissions.

The TERM addresses seven issues:

- Freight transport and modal split
- Passenger transport and modal split
- Greenhouse gas emissions from the transport sector
- Local emissions and air quality
- Transport fuel developments
- Transport noise
- Need for demand management

The TERM indicators were selected and grouped into seven key questions:

- Is environmental performance of the transport sector improving?
• Is management of transport demand getting better at improving the modal split?
• Are spatial and transport planning becoming better coordinated so as to match transport demand to the need for access?
• Is the use of existing transport infrastructure capacity optimized and moving towards a better balanced intermodal transport system?
• Is there movement towards a fairer and more efficient pricing system that ensures that external costs are internalized?
• How rapidly are cleaner technologies being implemented and how efficiently are vehicles being used?
• How effectively are environmental management and monitoring tools being used to support the making of policies and decisions?

5 Recommended Approach to Ensuring Sustainability and Good Governance in Transport Corridors

By Francis Chirimuuta

In ensuring sustainability and good governance in transport corridors based on the detailed guidelines in this Module 3, the following approach is recommended for RECs and their member States:

5.1 Defining Sustainability in Transportation

Sustainability in the context of development is generally defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. It is in the context of this widely accepted broader perspective of sustainability that RECs and their member States need to approach the issue of ensuring a sustainable transport system using the corridor approach.

The widely accepted definition of the European Union which is recommended to the RECs and their member States defines a sustainable transport system as one that:

• allows the basic access and development needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations;
• is affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development;
• limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and, uses non-renewable resources at or below the rates of development of renewable substitutes while minimizing the impact on the use of land and the generation of noise.”
Sustainable transport must be understood and embraced by RECs and their member States as encompassing the following tenets:

- economic sustainability
- financial sustainability
- institutional sustainability
- environmental and ecological sustainability; and
- social sustainability

It is recommended that RECs and their member States must strive to put in place a sustainable transport system that is economically balanced, financially sufficient, institutionally commercially minded, environmentally sound, safety conscious and socially aware.

### 5.2 Defining Good Governance in Transportation

An all-inclusive definition of good governance must be understood by the RECs and their member States as encompassing the following definitive characteristics:

- accountability by all key stakeholders
- transparency of decisions that follow rules and regulations
- rule of law that is enforced impartially
- participatory by all stakeholders
- responsive to the divergent interests of all the various stakeholders
- equity and inclusiveness that ensures all members of society have a stake in it
- effectiveness and efficiency that benefits society and results in sustainable use of natural resources.
- consensus oriented that balances and rationalises the different individual interests for the common good of the whole community.

It is imperative that RECs and their member States exhibit fundamental willingness to incorporate these characteristics of good governance into the corridor based transport system.

### 5.3 Principles for Attaining Sustainable Transport and Good Governance

RECs and their member States must adopt and incorporate the following principles into the transport system for sustainable transport and good governance:

#### 5.3.1 Economic sustainability

This entails:

- prioritisation of finances for critical corridor investments and maintenance
• supporting fair competition between transport modes as a pricing control mechanism.
• well targeted subsidies for desired benefits and avoidance of inefficiencies and waste based on commercial principles.

5.3.2 Financial sustainability
This involves the securing of sufficient funding from increased private sector participation on a user pay principle basis and the creation of dedicated funds for the development and maintenance of each mode that must be transparently governed.

5.3.3 Institutional sustainability
There is critical need to forge public - private partnerships in the transport sector in which, as a general proposition, Government deals with issues transport corridor policy and regulatory frameworks whilst the private sector deals with issues of transport corridor management, operation and maintenance of infrastructure and services. This will ensure the provision of more cost effective and quality services by the various modes of transport constituting the corridor.

5.3.4 Environmental and ecological sustainability
There is need to reduce the present causes of environmental and ecological risks by taking the following measures:

a. Updating regulations and improve monitoring by integrating international environmental standards covering all modes of transport.

b. Reducing vehicle emissions and use non–motorised transport through enforcement of set minimum standards and routine compliance tests.

c. Making the polluter pay through introduction of emission charges and penalties amongst other surrogate measures such as fuel taxation and differentiated vehicle licencing fees.

5.3.5 Safety and social sustainability
This entails:

• prioritisation of safety as a measure for reducing the high social and economic costs of accidents through greater public awareness and effective enforcement of rules.

• embracing international standards for safety for the various modes.

• creation of job opportunities and tackle job lay-offs and unemployment through increased private sector participation in transport management and operations.

• improvement of availability of intermediate transport used for local community requirements.
5.4 **Indicators of Transport Sustainability**

The RECs and their member States must put in place frameworks and systems for measuring progress being made towards sustainability and good governance in corridor transport. Such frameworks include, *inter alia*, the TERM framework which monitors the progress and effectiveness of transport and environmental integration strategies. The TERM framework addresses several issues that include:

- Freight transport and modal split
- Passenger transport and modal split
- Greenhouse gas emissions from the transport sector
- Local emissions and air quality
- Transport fuel developments
- Transport noise
- Need for demand management

RECs and their member States must comprehensively answer the questions relating to the TERM indicators as outlined in the detailed guidelines above as a way of assessing the effectiveness of the monitoring mechanisms put in place.
6 Annexes

Mission Statements of Various Departments of Transportation in Canada & United Kingdom

As example, following are the mission statements defined in Canada and United Kingdom. It should be noted that under sustainable transport, many issues of good governance are also included.

<table>
<thead>
<tr>
<th>Box 1 – CANADA MISSION STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transport Canada</strong> has adopted a set of principles that recognize sustainable development as among the highest of departmental priorities:</td>
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</tbody>
</table>
| (1) Social principles: safety and health, access and choice, quality of life;  
(2) Economic principles: efficiency, cost internalization, affordability;  
(3) Environmental principles: pollution prevention, protection and conservation, environmental stewardship; and  
(4) Management principles: leadership and integration, precautionary principle, consultation and public participation, accountability |
| The Centre for Sustainable Transportation, a Canadian organization, defines a sustainable transportation system as one that: 1. Allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations; 2. Is affordable, operates efficiently, offers choice of transport mode, and supports a vibrant economy; 3. Limits emissions and waste within the planet ability to absorb them, minimizes consumption of nonrenewable resources, reuses and recycles its components, and minimizes the use of land and the production of noise. |
| Source: MOST PROGRAM (Moving On Sustainable Transport )Minister of Transport, Canada | Source: The Centre for Sustainable Transportation, Canada |

The United Kingdom has also developed some guiding principles to ensure sustainable development and good governance.

<table>
<thead>
<tr>
<th>Box 2 UNITED KINGDOM MISSION STATEMENT</th>
</tr>
</thead>
</table>
| **Sustainable development** is about ensuring a better quality of life for everyone, now and for generations to come. This requires meeting four key objectives at the same time in the United Kingdom and the world as a whole:  
(1) Social progress which recognizes the needs of everyone;  
(2) Effective protection of the environment;  
(3) Prudent use of natural resources, and  
(4) Maintenance of high and stable levels of economic growth and employment |
| The United Kingdom presents the ten guiding principles:  
(1) Putting people at the center;  
(2) Taking a long term perspective;  
(3) Taking account of costs and benefits;  
(4) Creating an open and supportive economic system;  
(5) Combating poverty and social exclusion;  
(6) Respecting environmental limits;  
(7) The precautionary principle;  
(8) Using scientific knowledge;  
(9) Transparency, information, participation, and access to justice, and  
(10) Making the polluter pay. |
| Source: UK Department of Transport | Source: DEFRA: UK Department of Environment Food and Rural Affairs |
MODULE 4
BUILDING FUNCTIONAL CORRIDOR TRANSPORT TRANSIT SYSTEM1 (*)
The Legal, Regulatory and Administrative Barriers
By Philippe Cabanius

Table of Contents
1 Review of Main Types of “Software” Barriers ................................................................. 4
  1.1 Barriers Related to Different Legal, Regulatory and Administrative Practices .... 4
  1.2 Inadequate legal framework .......................................................................................... 4
  1.3 Inadequate national customs transit regime ................................................................. 5
  1.4 Transit initiation often lengthy, especially in ports ...................................................... 5
  1.5 Freight Forwarders and Customs Brokers ....................................................................... 6
  1.6 Transport Documentation .............................................................................................. 6
  1.7 Risks & Insurance .......................................................................................................... 7
  1.8 Lax regulation of entry for the operators authorized to participate in transit operations ........................................................................................................ 7
  1.9 Protection of National Operators .................................................................................. 8
  1.10 Different norms for vehicles and other requirements for vessel drivers ................. 8
  1.11 Lack of coordination .................................................................................................... 8
  1.12 Unilateral actions ......................................................................................................... 8
2 Barriers Related to Transport Services Availability ......................................................... 8
  2.1 Dwell time ...................................................................................................................... 8
  2.2 Border Crossing Delays ................................................................................................. 9
  2.3 Freight allocation system .............................................................................................. 10
  2.4 Use of convoys to escort the vehicles in transit, numerous security checkpoints ...... 11
  2.5 Transit fees .................................................................................................................... 11
3 Building a Functional Transit System ............................................................................. 11

1 (*) see C RECOMMENDED APPROACH by Francis Chirimuuta p. 18
<table>
<thead>
<tr>
<th>3.1</th>
<th>A well-functioning customs clearance system</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Regionally Integrated Transit System</td>
<td>13</td>
</tr>
<tr>
<td>3.3</td>
<td>Reduced border crossings times</td>
<td>14</td>
</tr>
<tr>
<td>3.4</td>
<td>Information and communications technology (ICT) as trade enabler</td>
<td>15</td>
</tr>
<tr>
<td>3.4.1</td>
<td>Single window</td>
<td>15</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Intelligent Transport Systems for Smart corridors</td>
<td>15</td>
</tr>
<tr>
<td>3.5</td>
<td>Competitive trucking industry</td>
<td>16</td>
</tr>
<tr>
<td>3.6</td>
<td>Harmonization of requirements for the admission of road vehicles across borders</td>
<td>17</td>
</tr>
<tr>
<td>3.7</td>
<td>Vehicle third party insurance scheme</td>
<td>17</td>
</tr>
<tr>
<td>3.8</td>
<td>Maximum Axle Load</td>
<td>17</td>
</tr>
<tr>
<td>3.9</td>
<td>Communication and coordination</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Recommended Approach to Building an Effective Transit System</td>
<td>19</td>
</tr>
<tr>
<td>4.1</td>
<td>Defining an Effective Transit System</td>
<td>19</td>
</tr>
<tr>
<td>4.2</td>
<td>Identification of Barriers to an Effective Transit System</td>
<td>19</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Related to different legal, regulatory and administrative practices along the transit corridor</td>
<td>19</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Related to availability of transport services along the transit corridor</td>
<td>20</td>
</tr>
<tr>
<td>4.3</td>
<td>Developing an Effective Transit System</td>
<td>21</td>
</tr>
</tbody>
</table>
Transit can be national or international. Transit is national from border, generally the port (entry gate) to an internal destination where goods are cleared in the country (national transit) and international when goods are carried from an entry border port (entry gate) to an exit border port (international transit).

“International Transit trade” is when a country’s foreign trade passes through a transit country’s territory prior to reaching its final destination. As for overseas trade, this usually implies the use of a foreign country’s airport or seaport.

International transit refers to the procedure where national borders are crossed e.g. the passage of goods (passengers and baggage) through a particular country (the transit country) with the journey beginning and ending outside the particular country.

While in some cases transit can take place between costal countries like in the case of the Abidjan – Lagos corridor, most transit takes place between land locked countries and countries with access to the sea.

In some cases, transit is simply from one country to the destination country and there is only one border to cross. In other cases, the transit shipment crosses several borders for instance when a shipment goes from Cote d’Ivoire to Niger or Mali through Burkina Faso or from Kenya to Burundi through Rwanda and Uganda.

Only in rare few cases the cargo originates and ends up in the same country after transiting through a second country. An example of this is the case for commodities destined for the Northeastern part of India from other parts of India which transit through Bangladesh, as all alternative Indian routes are much longer.

In all cases, transit means passage through one or more sovereign transit countries and through which trade must pass in order to access international shipping lines and overseas markets.

In other words, “transit” encompasses the actual movements of goods, vehicles, transport units and drivers or crew through the transit territory with the journey originating and ending outside that territory. In this context, transit encompasses transport and customs issues which include documentary and operating procedures as well as policies and protocols governing the movement of goods and vehicles along the corridor including at border crossings.

In Africa, most transit takes place between transit countries where the sea ports are located and land locked countries’ centers of production and consumption as final destination.

Being land locked is different from remoteness or distance from the sea. Many large countries have regions or cities that are further away from the sea than most capitals of landlocked countries. If distance has a measurable impact on transport costs, this should not be confused with the specific problems associated with international transit traffic whereby crossing borders faces the
“fragmentation of the supply chain” i.e. the extended sequences of distinct operations, with different procedures, agencies and services involved which encourage rent seeking and overregulation.

Several recent studies\(^2\) have attempted to assess the specific impact of transport costs on countries being land locked. They have concluded that this situation does not only lead to additional monetary transport costs but also to unreliable or unpredictable hinterland connections with higher delivery times, losses due to physical damage to goods, excess stocks to avoid shortages caused by uncertain transport times, emergency shipments, suspended operations and lost business opportunities.

A **functional transit system regime** governs the inland movement of goods from their origin in the transit country (generally a sea port) to their final destination (the clearance destination in the land locked country) to make it **“interoperable”** which means compatibility of transport infrastructure on both sides of the border, no duplication or different set of laws and regulations, administrative requirements, commercial practices and technical standards applicable to cargo, transport services, vehicles, across borders.

## 1 Review of Main Types of “Software” Barriers

The review of the international transit in Africa identifies two types of “software” barriers and vulnerability, besides the dependence on neighbors’ peace and stability\(^3\):

1. Barriers related to different legal, regulatory and administrative practices;
2. Barriers on transport services availability;

While they don’t all impact in the same way on each country, these two categories of barriers describe where and how bottlenecks can emerge.

### 1.1 Barriers Related to Different Legal, Regulatory and Administrative Practices

The most critical barriers facing transit trade and transit operations are related to the legal, regulatory and administrative (documentation and procedures) practices which differ between countries interconnected by the same transit corridor.

### 1.2 Inadequate legal framework

The majority of land locked and transit countries in Africa do not have an appropriate legal framework governing international trade and transport, with the customs regimes being a major cause of corridor inefficiency. Their existing laws and regulations are often fragmented, do not meet modern trading conditions and practices and, in addition, differ between the transit and the land locked countries.

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\(^2\) ARVIS 2014, Faye et al., 2004; Arvis et al., 2011

\(^3\) For instance, the first civil war (2002-2004) and the second one (2011) in Cotes d’Ivoire have interrupted the transit through the port of Abidjan.
There is a need to take serious steps towards harmonization and modernization of domestic laws and regulations, on the basis of internationally agreed rules and conventions. Module 5 Transit Corridor Agreements: Backbone of Integration addresses this issue more specifically.

1.3 Inadequate national customs transit regime

A number of African countries do not have a functioning internal customs transit regime facilitating the transportation of goods from an entry border to an exit border without payment of duties and other charges due on importation and without undergoing other import regulations applicable in the transit country.

Such a regime relies usually on banking and insurance sectors to provide a financial security instrument in the country of transit that will guarantee the payment of duties in case the goods do not leave the country of transit when using the transit procedure.

The guarantee acceptable by the Customs is defined by the regulation of the transit country. A guarantee can be provided by a bank (bond) or by an insurance company (guarantee). Without access to a bond or a guarantee system, Customs requires some form of duty deposits and imposes customs-supervised convoy system that is both costly and inefficient.

The non-availability of actual guarantees constitutes a serious bottleneck for customs transit in most African countries.

The calculation of the guarantee by the Customs is a problem when the value on which it is based cannot be ascertained properly. The owner of the goods or its representative tends to provide undervalued invoices in order to limit the value of the guarantee.

In addition, weak information systems represent another problem. Transit requires an exchange of information from at least three places: transit initiation, transit termination, and the guarantor (to validate and discharge the bonds).

The management and tracing of the transit declaration is not always properly and rigorously implemented and, in many cases, is not automated. This means that transit operations initiated in the transit country are not properly accounted for and closed when the cargo has actually arrived in the country of destination, causing major errors and delays in the discharge of the bonds.

1.4 Transit initiation often lengthy, especially in ports

The time to initiate transit in most African ports is similar to the time to clear goods for local consumption in the costal country and it can take even longer, despite the fewer procedures and no payment involved. Time to clear goods or initiate transit can be relatively long; two to four weeks is the norm in most African ports not only for large but small transit operators too.

The reason is that in many cases, customs does not clearly separate clearance for goods for the transit country market from transit procedures but applies the same process to both.

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4 Raballand (2012)
Goods in transit should not be subject to the same risk management and control as locally cleared goods. In theory, transit could be initiated in a port using the information already available in the shipping manifest for checking classification and valuation.

1.5 Freight Forwarders and Customs Brokers

Freight Forwarders, as logistics agents, play a critical role in organizing supply chains to move goods along a transit corridor. Their role is to organize international (or eventually domestic) logistics on behalf of shippers and consignees. This includes organizing transportation with railways or trucking companies, and customs representation activities at the border.

The role of customs brokers is more specific since they are accredited to fill out customs and transit declarations, and eventually to perform other trade-related procedures, on behalf of their clients. The Customs code lists the professional requirements and the financial guarantees (deposits or bonds) that companies offering brokerage should possess.

In practice, the two activities are quite intertwined with each other. In most countries, freight forwarding companies also perform customs brokerage. Companies that once started as pure customs representatives may eventually start providing freight forwarding services.

Proper regulation of customs brokerage by customs agencies is important to prevent non-professional services (part-time brokers), monopolistic behavior or collusion among brokers and customs officials. Requirements have to include higher level of guarantees in order to reduce the numbers of registered brokers.

1.6 Transport Documentation

Transit procedure requires a Transport document, the Bill of Lading, and a Transit customs document.

The use of a suitable transport document can reduce costs and delays in the delivery of goods and thus promote trade efficiency.

The Transit customs document has four copies, issued by the customs office of entry in the country of transit which controls the origin of the transit shipment (generally at the port). It is checked by the customs office at the exit of the country.

When the copies of the document match, the transit operation is completed and the guarantee released. Otherwise, if the transit procedure is not completely satisfactory, the payment of the import duties, taxes and other charges are due.

This requires using and relying on an efficient information system to control the start and completion of the transit procedure, i.e. certifying that the goods in transit have effectively left the country of transit so that the security can be released.

Increasingly, the transmission of these documents is done electronically but requires that compatible information and communication technology be used along the entire transport chain. The success of the system as a whole is usually determined by its weakest link.
1.7 **Risks & Insurance**

Insurance of cargo and of means of transport may not be available or be quite expensive when goods or vehicles have to pass through the transit country to enter into a third country. Especially, in countries where risks are perceived to be high, the difficulty of obtaining insurance will lead to reluctance to allow vehicles or containers to move beyond national borders.

Often this leads to a situation where the shipping company is unwilling to allow its container to leave the port and the containerized import has to be offloaded inside the port. In other cases, transit countries may require that a second insurance policy be taken with national insurance companies, a situation that tends to further increase the overall transit costs.

Furthermore, the non-availability of liability and/or third party insurance covering transport operations across borders prevents door-to-door transport services beyond national borders which necessitates transshipment of cargo between transport units at the border.

1.8 **Lax regulation of entry for the operators authorized to participate in transit operations**

The aim to keep requirements low in order to ensure that transit operations are opened to small operators (truckers, freight forwarders and customs brokers) compromises quality and compliance in services.

The problem is that lax regulations of entry applicable to transit operators don’t provide incentives for offering the best services and encourage the development of low quality services – services that cannot cover the full transit supply chain and undermine the development of good, comprehensive services.

The European Common transit system relies on the concept of “authorized economic operators” (AEOs). The operators when accredited by customs get specific incentives such as reduction in or even a waiver of the comprehensive guarantee (See Box 1).

<table>
<thead>
<tr>
<th><strong>BOX 1: Authorized Economic Operators (AEOs)</strong></th>
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<tbody>
<tr>
<td>The AEOs can not only be exporters or importers but also the logistic service providers. Operators are accredited by customs as AEOs when they prove to have high-quality internal processes that will prevent goods in international transport to be tampered with, which means they can provide all of the following: Ensure the integrity of the information, that what is said to be in a container is really in the container and nothing else. Ensure the integrity of its employees, that they will not put goods in the container that should not be there. Secure access to its premises to prevent unauthorized people from putting goods in the container. As a result of such accreditation, customs will trust the operator and will perform fewer or no inspections on goods imported or exported by the AEO. This facilitates the movement of the goods and makes them available more quickly, which lowers trading costs. The recognition of an AEO by a national customs agency implies that other countries shall grant similar status.</td>
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</table>
1.9 Protection of National Operators

Protective practices, not just by Governments, but also by the freight industry itself, often restrict cross border operations through a cumbersome system of permits. The result is a sub-optimal utilization of a region’s transport capacity.

Often, national road associations lobby Governments to maintain this control so as to preserve their market share. Such policies may imply the need to transship cargo between trucks of different nationalities at the border. Even if a foreign truck is allowed until its final destination, it will still be prohibited from taking backhaul cargo, forcing it to return empty.

Such restrictions in practice lead to significant increases in transport costs.

1.10 Different norms for vehicles and other requirements for vessel drivers

Trucks may be subject to different axles load limits and to different environmental norms. Drivers’ licenses and other certification documents may also not be mutually recognized.

These restrictions or administrative hurdles on the movement of truck and their drivers equally lead to obstacles for the movement of goods.

1.11 Lack of coordination

Coordination between transport operators in land locked and transit countries and between shippers and customs officials is often poor. This may be due to poor basic communications, limited professional cooperation among trade services providers, and also to a lack of institutional mechanisms between the trading communities and the local authorities.

1.12 Unilateral actions

As already mentioned, requirements are often different in terms of documentation, customs inspection, security checks and transit and other charges from one side of a border to the other one. But more critically, requirements may change from time to time without operators being given adequate notification of the changes. This leads to uncertainty and additional costs for shippers and transport operators, who have to prepare for unforeseeable delays.

2 Barriers Related to Transport Services Availability

2.1 Dwell time

Dwell time refers to the amount of time cargo stays in a terminal yard or storage area while waiting to be loaded. In the case of ports in Africa, the amount of dwell time cargo spends in the port terminal
averages about 20 days, compared with 3-4 days, in most international ports, despite the fact that additional berths have been added and most ports are already run by private container terminal operators\(^5\).

It has been noted, however, that sometimes importers may use the ports to store their goods before paying and customs brokers have little incentive to move the goods since they pass the costs of demurrage fees to the importers.

### 2.2 Border Crossing Delays

Transit trade often faces costs and delays at border crossings with long queues of trucks measured in days. It represents a major obstacle to trade and a transit time increased.

Even if all paper work is in order and all requirements are fulfilled, transit traffic may still be affected by long waiting times at the border. These may be due to inadequate manning or poor use of ICTs at Customs border posts, short border post operating hours, or a lack of coordination between the two countries’ customs practices.

<table>
<thead>
<tr>
<th>BOX 2: TRANSIT TO MALAWI</th>
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<tbody>
<tr>
<td>Transit cargo from Durban (South Africa) to clearance in Blantyre (Malawi) has to use eight different brokers, one on each side of every border, essentially to fill and submit the same information on the same document used by the Common Market for Eastern and Southern Africa (COMESA) and Southern African Development Community (SADC). In addition, different domestic banks are covering the transit in each of the four countries on the corridor.</td>
</tr>
<tr>
<td>Source: Connecting landlocked Developing Countries to Markets –Trade Corridor in the 21st Century - the World Bank (chapter 5 p. 82)</td>
</tr>
</tbody>
</table>

A world Bank paper estimated that the total cost of crossing a border in Africa is the same as the cost of inland transportation of over 1000 miles (1600 km) or the cost of 7000 miles (11 000km) of sea transport\(^6\). In comparison, the cost of crossing a border in Western Europe is equivalent to only 160 km of inland transportation.

In addition, there still exists a widespread practice of unofficial payments that need to be made during the border crossing to avoid lengthy physical inspections or administrative hurdles.

The negative effect of such delays and payments goes beyond the average time or money spent at the border, because they increase the uncertainty for service providers and shippers. Extra time and financing is needed to simply cover the unpredictability of expenditures and delays at the border.

Transit should not require heavy border infrastructure since the process at the border should be limited to only checking the Transit Declaration Manifest and the seals without any inspection. The transit flows, in addition, should be separated from the flows of trucks which are cleared at the border.

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\(^5\) Raballand 2012

2.3 Freight allocation system

Road transport has become the dominant transport mode for freight on most corridors in Africa.

At first sight, trucking should be a highly competitive industry that meets the basic requirements for perfect competition: many suppliers, with none of them in an ostensibly dominant position, similar nature of services, open information on prices, almost no barriers to entry and exit for operators. It is not the case.

One of the reasons is the low utilization of the trucks as the truck idle time remains high with roundtrips lasting long weeks if the truck is waiting for a return load (less mileage per year means less income and higher fixed costs to be covered on each paying trip).

More generally, the freight allocation system together with the system of road transport permits and trucks quotas, by setting the maximum number of permits than can be made available to each county has been seen as a way to protect the transport industry of a country which could not have otherwise supported an open competition from foreign transport operators.

Such a system introduces further barriers and is difficult to implement. It also leads to a reduction of choices and inflexibility in transport and always results in higher transport prices and increased empty haulage.

Similarly, the queuing system for trucks or “tour de role” for individual truckers still prevalent in Francophone Africa countries, or other restrictions to a competitive market such as restrictions on a foreign truck from taking backhaul cargo and forcing it to return empty, pushes costs up, lowers quality of service, and prevents the emergence of organized companies having long term commercial relationships with shippers and freight forwarders.

These situations of market restrictions are incompatible with the implementation of a regionally integrated transit regime.

Improving the competitiveness and efficiency of the trucking industry, implies shifting away from current opaque practices for access to the transport market towards a situation in which transport operators are recognized based on their compliance with a number of access criteria, ability to provide quality transport services in a professional manner.

In that sense, as an alternative to a quantity based transit permits licencing system which limit the number of transport operators authorized to carry out international transport, countries could consider to award quality license to carry out international transport to those transport operators who meet a set of standard (reliability, security, professional competence, financial solvency, environmental standards, etc.)

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7 Where bilateral agreements are based on a quota system, the common practice is to fix the number of permits at the same level for both parties. However, if one party has bigger trade volumes or more efficient operators, then it may exhaust its quota faster than the other party. Unless the quota is increased, the party with higher volume must pay for additional permits and access to infrastructure. See Arvis, Raballand, and Marteau (2010)
It will result an increase in efficiency with fewer trucks operating more hours and longer distance, at lower tariffs.

2.4 Use of convoys to escort the vehicles in transit, numerous security checkpoints

En route, lack of security along certain transit corridors imposes limitations on operating hours, restrictions on the flexibility of truck operations and sometimes convoy systems.

Suspecting fraudulent practices in transit operations, Customs resort to the use of convoys that accompany the transit vehicles during the transit trip, accompanied by police and customs officials. Assembling sufficient vehicles for convoys may delay trucks for days and induce additional costs without fully eliminating all risks of fraud and corruption.

In some countries, crossing local administrative borders involves, in addition, numerous checkpoints and road blocks under the auspices of the local administration. The successive individual fees may be small but they delay the vehicles, create the opportunity for informal payment and generate unforeseen expenditures.

2.5 Transit fees

Countries may charge transit fees in one form or another. The transit fees may operate in combination with a quota permit system, with fees charged only when the annual quota of permits has been exceeded.

Furthermore, there may be differences in the fees levied on vehicles exceeding normal weights and dimensions, or in the number of fees levied on vehicles operating beyond the quotas. Some fees may be considered discriminatory.

3 Building a Functional Transit System

The objective of a functional transit system is to improve trade logistics through measures which:

- Improve efficiency through lowering costs and reducing the time the goods spend in transit;
- Increase the reliability of the delivery by reducing uncertainty and lowering risk

The gains would come from:

1. A well-functioning customs clearance system
2. A regionally integrated transit system
3. Reduced border crossings times
4. Information and communications technology (ICT) as trade enabler

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8 “The convoys can be several kilometers in length (if there are 300 transit trucks, each 20 meters in length and with half that distance between them, they would form a convoy of 9 kilometers long which needs to travel at night to avoid disrupting other road traffic. Having to wait until a typical 8:00 p.m. convoy departure imposes a long time penalty on the trucks. The cost of the escorts is borne by the trucks in the convoy. Convoys need time to be created (up to four days) and are slow”. (Connecting landlocked Developing Countries to Markets – Trade Corridor in the 21st Century the World Bank – Chapter 5).
5. Competitive trucking industry
6. Communication and cooperation

3.1 A well-functioning customs clearance system

At the initiation of transit (at the entry point), customs issues the transit manifest and affixes, against a guarantee provided by the principal, the seals to closed trailers or containers to ensure that goods cannot be removed from or added to the loading space of the truck or the container without breaking the seals. Seals and trucks approved for use in the transit operation must conform to well-specified criteria to ensure their effective and secure operation.

The principal of the transit operation (the owner of the goods) or his agent (freight forwarder or trader) should deposit a guarantee as a bond by a bank or a form of insurance by a guarantor (insurance company) covering the value of taxes and duties that would be due in the country of transit. The guarantees acceptable by the customs are defined by the regulations of the transit country. Customs publishes a list of financial institutes authorized to act as guarantors.

At the termination of transit (at exit post or inland clearing destination), customs checks the seals and the manifest to identify violations and potential leakages and then discharges the guarantee (release of the bonds) after reconciling information on entries into and exit from the customs territory. Customs should properly manage the information on the goods entries and exit from the customs territory (inbound and outbound manifest information).

In applying controls, Customs may differentiate clearance procedures and treatment of goods in transit, depending on the quality of the operators and their vehicles, and the sensitivity of the goods carried.

<table>
<thead>
<tr>
<th>BOX 3: BEST CASE SCENARIO FOR TRANSIT FACILITATION</th>
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<tbody>
<tr>
<td>Containerized cargoes are discharged at the port. All documentation is in order and has been transmitted electronically to Customs, which has pre-cleared the goods for transit. Customs inspect the seals and the transport operator gives a guarantee for the amount of duty.</td>
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<tr>
<td>There is a transit agreement in place that allows a number of transport operators to transport the goods along the transit corridor.</td>
</tr>
<tr>
<td>The multimodal transport operator selects one of these operators to undertake the whole transit operation. There are harmonized customs transit documents.</td>
</tr>
<tr>
<td>At the border, a joint border post team inspects the cargo documents, the seal and the driver’s documents.</td>
</tr>
<tr>
<td>At the final destination, Customs representatives have been informed of the expected arrival time at the consignee’s premises and are there shortly after the arrival of the truck and container to clear the goods;</td>
</tr>
<tr>
<td>The truck has found a return load through a local cargo exchange, so that the return journey will generate revenue and at the same time make use of the container.</td>
</tr>
</tbody>
</table>

Source: challenges and opportunities for further improving the transit systems and economic development of land locked and transit developing countries UNCTAD August 2003
3.2 Regionally Integrated Transit System

Legally, the regional transit system is a sequence of independent transit procedures along a trade corridor with authorities in each customs territory ultimately responsible for transit in their territory by setting their own rules.

However large gains are possible with cross border cooperation and with the creation of a framework to integrate transit across territories into a single procedure.

A key element is the establishment of a single document, commonly known as the “carnet” that accompanies the shipment along the transit corridor and allows officials to verify the shipments compliance with the transit regime.

The carnet transit regime or regional single procedure regime must include the following characteristics to ensure similarity of the transit procedures across countries:

- Harmonized documentation
- Common standard for transit operators
- Common enforcement standards
- Consistency in manifest reconciliation to facilitate the discharge of the bonds

The most difficult element in a carnet transit is regional integration.

The only fully developed regional systems to date are the TIR and the European common transit system.

The Customs Convention on the International Transport of Goods under Cover of the TIR Carnets, or TIR Convention adopted in 1960 and revised in 1975, is the only existing global transport regime (though still Eurocentric). Among the Sub-Saharan African countries, only Liberia is a Contracting party to the TIR Convention and only Kenya is classified as Interested Party.

The TIR system is widely seen as the “best practice” that sets the standard and should serve as a model for any future regional transit frameworks. But it has also been criticized for its centralization under a Geneva based organization and the cost of entry into the system.

<table>
<thead>
<tr>
<th>BOX 4: TIR FIVE MAIN REQUIREMENTS</th>
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<tbody>
<tr>
<td>• <strong>Secure vehicles</strong>: the goods are to be transported in containers or compartments of road vehicles constructed with no access to the interior – such as the vehicle’s load can be “sealed”, preventing its contents from being extracted without breaking the seal or allowing goods to be removed or added during the transit procedure – so that any tampering will be clearly visible.</td>
</tr>
<tr>
<td>• <strong>International guarantee valid throughout the journey</strong>: to ensure that the customs duties and taxes due are covered by the national guarantee system of the operator.</td>
</tr>
<tr>
<td>• <strong>National associations of transport operators</strong>: national associations control their members’ access to the TIR regime, issue the appropriate documents and manage the national guarantee system</td>
</tr>
<tr>
<td>• <strong>TIR carnets</strong>: this is the standard international customs documents accepted and recognized by all signatories of the TIR Convention.</td>
</tr>
</tbody>
</table>
Some African initiatives – The Convention is largely enforced in Europe, the Maghreb and the Middle East but has largely remained ignored in Africa. Under regional framework, some related initiatives have however been taken.

For instance, the members of the Economic Community of West African States (ECOWAS) tried, so far in vain, to replicate the key features of TIR following their signature in May 1982 of the Transit Routier Inter Etat (TRIE)/ Interstate Road Transport (ISRT) Convention.

The poor implementation of the ISRT/ TRIE “defining the conditions under which transportation by road shall be carried out between Member States of the Community” (Art 2) faces some key problems. One is the absence of real management of the bonds comparable to the TIR and, de facto, no real customs guarantee attached to the TRIE/ISRT carnet. Still, each country crossing must be guaranteed by separate customs bonds, multiplying the procedures and the delays, while adding to transaction costs.

COMESA has developed a Regional Customs Transit Guarantee (RCTG – CARNET) as a Customs transit guarantee scheme that ensures that Customs in a transit country receives proper payment for dues and duties for any goods in transit under customs seals in the Comesa region that are improperly discharged.

3.3 Reduced border crossings times

Reduced border crossing times has become a priority for the different Regional Economic Communities (RECs) in their efforts at boosting intra-regional and international transit trade.

One of the solutions rapidly gaining momentum in Africa is the one-stop border post (OSBP) approach, in which, border agencies interventions from both countries are undertaken from a single common control zone.

This approach has two main variants, the joint model, with common facilities for border agencies procedures at the border or at close proximity in any of the two countries, or, for the second model, specialization of the existing facilities on each side of the border to jointly process import trade. In addition, transit flows should be separated thanks to a dedicated separate fast lane from the flows to be cleared at the border.

The East African Community (EAC) has adopted the OSBP concept as the solution by passing the One –Stop Border Posts Act in 2016 whereby border control officers of two adjoining States carry out their controls jointly from the same control zone in order to save time.

The East African Community (EAC) experience with OSBPs shows that dwell time at the border has been significantly reduced to a matter of hours where such controls used to take days prior to the
introduction of the concept. The factors driving that success are the supporting IT, the connectivity between Customs agencies and the effective involvement of the private logistics operators (truckers, drivers and C&F agents).

Other regional initiatives are also being undertaken such as: SADC has included OSBPs in its Southern Africa Infrastructure Master Plan, and ECOWAS is rolling out its Joint Border Posts program throughout West Africa.

However, despite the relatively high expectations, the results in terms of time savings for the few border posts that have been implemented so far appear somehow disappointing. Part of the problem is that the emphasis has been mainly on the physical facilities, whereas most gains can be made through soft reforms, as the East Africa experience with OSBP shows.

3.4 Information and communications technology (ICT) as trade enabler

Automation of documentation and electronic submissions are notably being utilized at the border posts for processing of customs and transit declarations.

IT software such as the UNCTAD ASYCUDA is widely available and mastered. In fact availability of IT at processing point is no more a major problem.

3.4.1 Single window

Despite the gains brought about by ICTs, one of the issues is that in most countries, electronic declarations still have to be accompanied by a paper version of it. The second issue is that most progress is limited to processing customs declarations, while traders are also required to obtain and process the import license, health, SPS or veterinary permits with other border control agencies. These other border control agencies can potentially negate the gains achieved with the processing of customs declarations.

Eventually, processing of all these trade documents and data in electronic or paper form through a single entry point or trade single window should solve this problem.

A Single Window for Trade can be an important facilitation tool. If implemented effectively, it can simplify procedures and formalities for document submission.

3.4.2 Intelligent Transport Systems for Smart corridors

The Smart Corridor (SC) is defined by the African Union Commission (AUC) as a modal or multimodal surface transport route with quality infrastructure and logistic facilities, between two or more countries, used to carry intra-regional and international cargo. Typically, a Smart Corridor will include innovative Intelligent Transport Systems (ITS) aimed at facilitating trade through simplification of transport administrative processes and accelerating information exchange among the key corridor stakeholders.

A Smart Corridor will have new technologies, implemented in order to reduce transport time and cost across the African continent and more specifically for landlocked countries. These technologies are referred to under the general heading of Intelligent Transport Systems (ITS). ITS components include
computerized network infrastructures, communication equipment, Electronic Data Interchange (EDI) and software.

The centerpiece of ITS within a Smart Corridor is the multi-countries **Performance Monitoring System** (PMS). Within corridor movement of goods there is a succession of administrative and operational steps involving a substantial amount of participants. The PMS sources information from each of the Corridor stakeholders for each transported cargo. The database is able to track the cargo from the entry point to destination including the time taken for each stage. The aggregation of information enables the PMS to provide detailed statistics referred to as **Key Performance Indicators** (KPI). These figures can be used to highlight possible bottlenecks and responsibilities for improving performance.

### 3.5 Competitive trucking industry

A competitive trucking industry to lower costs and bring prices more in line with costs requires coordinated action in at least three areas:

1. **Regulate the access to the industry** to ensure only professional operators can provide trucking services. As a result of the revision of access criteria, some of the informal operators, with limited capacity of compliance, will no longer be allowed to operate, creating space for professional operators to operate at greater efficiency and profitability;

2. **Regulate the access to freight** to promote a competitive industry by liberalization of access to the transport market, both domestic and international, so as to introduce competition as an incentive for efficiency. This will imply formalizing the contractual relationship between the trucking company and the shipper (or its C&F agents), eliminating unnecessary intermediaries and quantity-based freight allocation quota system (still in place in some LLDCs) to protect national fleet;

3. **Establish a system of quality licensing.** Trucking licenses shall be provided to enterprises that meet specified minimum professional standards, in order to improve the operating environment and establish the conditions for profitable trucking companies. By imposing higher standards on truck drivers, operated vehicles, or the financial, legal, and ethical status of the companies, it raises the professionalism of the industry.

COMESA has for instance introduced a **carrier license** in Southern and East Africa with the following benefits: (i) there is automatic entry into the regional transport market for road hauliers in possession of the COMESA carrier license; (ii) the COMESA carrier license is paid for in local currency in the country of vehicle registration and hence there are foreign exchange savings; (iii) a carrier licence valid for 12 months provides stability and predictability in the road transport service industry; (iv) the liberalization of the regional trucking industry has resulted in competitive freight rates as a result of the abolition of the trucking monopolies and quota as it was in the past.
3.6 Harmonization of requirements for the admission of road vehicles across borders

The establishment of policy and legal instruments applicable to the circulation of road vehicles should be done in consultation between all countries using the corridor.

Such instruments should establish:

i) mutual recognition of driving licenses and vehicles registration documents;

ii) mutual recognition of third party motor including vehicle liability insurance schemes with compatibility between domestic insurance regulations and domestic insurance operations companies’ regulations;

iii) mutual recognition of certificates of roadworthiness of vehicles and agreed criteria for compulsory vehicle inspection with adequately equipped inspection centers in each member State, and setting up an efficient control system to ensure compliance;

iv) measures to reduce the current escalation of road accidents.

Some progress has already been made towards harmonization of the regulations regarding the circulation of road vehicles in all the African regions. All these points will be analyzed under Reports …… Road Transport Services in West Africa and in Southern Africa and Report …. On Road Safety and Road pollution.

3.7 Vehicle third party insurance scheme

In line with the International Motor Insurance Card System in and around Europe (the Green card), established since 1949 in the framework of UNECE11, African regional organizations have also established common third party motor insurance schemes: ECOMAS with the Brown Card applicable in Western Africa, CEMAC with the Pink Card applicable in Central Africa and COMESA with the Yellow Card applicable primarily in Eastern and Southern Africa.

3.8 Maximum Axle Load

In Southern and East Africa, axle load limits and road transit charges have been harmonized, with the following: (i) transport operators are able to load their trucks with the maximum authorized payload; (ii) harmonized axle load limits facilitate uniform axle load enforcement; (iii) these limits facilitate exchange of information on overloading and on habitual violators of axle load limits; (iv) there is uniform application of fines for overloading and excessive gross vehicle weights, based on agreed pavement damage formula.

11 In each member state of the Green Card System, the insurance companies established a Green Card Bureau operating with the recognition and approval of the government. The activities of the Green Card Bureau are established by law or regulation in each of the countries participating in the system. Each Green Card Bureau has two functions: 1) as a “Bureau of the country of accident”, it has responsibility in accordance with national legal provisions for Compulsory Third Party Motor Insurance for the handling and settlement of claims arising from accidents caused by visiting motorists; 2) as a “guaranteeing Bureau”, it guarantees certificate of Motor Insurance – (Green Cards) - which are issued by its member insurance companies to their policy holders.
Similarly, the West African and Monetary Union States (UEMOA) member states agreed in 2010 to adopt standards and procedures for control of the axle load of every vehicle\(^{12}\).

### 3.9 Communication and coordination

It is essential to give proper consideration to the interlinked roles of the two main players closely involved in making trade and transport more efficient along a given corridor: the public sector (government and different national, regional or local authorities) and the private sector services providers (carriers and freight forwarders, banks insurance companies and others).

Coordination and cooperation between the public and the private sectors tend to be weak within a country and between the countries of the corridor and working relations may be marked by mistrust. Any strategy for improved coordination requires a profound change in the disposition of all parties within a country and between countries and must involve all stakeholders along a given transit corridor.

Proper consultation mechanisms must be set up to propose, discuss, consult and seek consensus between commercial parties and government authorities from both landlocked and transit countries on facilitation measures to improve transit transport corridor operations.

UNCTAD has promoted the concept of National Trade and Transport Facilitation Committee (NTTFC). Such a committee brings together representatives of all public and private sector parties concerned with international trade and transport facilitation in a country: governmental entities, services providers and transport users. Established as a consultative body at the level of each country along the corridor; they can serve as regional coordination forums to recommend changes in formalities, procedures and documentation used in international transport.

In East Africa, the Northern Corridor has a permanent organization, the Transit Transport Coordination Authority (TTCA). It was established to monitor the implementation of the Northern Transit Agreement between Kenya, Uganda, Rwanda and Burundi and has developed into a relatively strong professional agency. It promotes procedures for more efficient cross border movements of goods and has been instrumental in introducing a single administrative document.

The political commitment for a transit policy allowing transit transport trade along a corridor is formalized in transit agreements.

(See Guideline report on Review of Main Worldwide Conventions on Transport and Trade and list of the African countries which have signed/ratified these conventions)

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\(^{12}\) It must be noted that the idea of regulating axle loads in West Africa dates back to 1982 when ECOWAS member States signed a convention which stipulates that the maximum axle-load of vehicles authorized to carry out interstate transportation, should not exceed 11.5 tons per axle.
4 Recommended Approach to Building an Effective Transit System

By Francis Chirimuuta

In building an effective transit system, the following fundamentals and approach are recommended:

4.1 Defining an Effective Transit System

Transit involves the movement of goods, vehicles and persons from a point outside the territory of a country to a destination within or outside the territory of that country. It is categorized as national transit if such movement emanates from a port of entry to a destination within the same country or international transit if it emanates from a port of entry or a point within one country and crosses a border or borders into another country. In the context of this definition, an effective transit system is one that encompasses the following:

a) A well-functioning customs clearance system
b) A regionally integrated transit system
c) Reduced border crossing times
d) Information and communications technology (ICT) as trade enabler
e) Competitive trucking industry
f) Communication and cooperation

4.2 Identification of Barriers to an Effective Transit System

Barriers must be identified so that they are dealt with and these generally fall into two categories as follows:

4.2.1 Related to different legal, regulatory and administrative practices along the transit corridor:

a) Inadequate legal framework

This relates to national laws that are inappropriate to govern transit trade and do not conform to international conventions and standards. It also relates to differences in the laws that govern transit between the corridor countries thus subjecting transit movement to all kinds of different regulatory frameworks and standards at different stages of movement.

b) Inadequate national customs transit regime

Lack of segregation and different treatment of goods in transit from those intended for import into a transit country. It also entails the absence of a customs bond system to safeguard the interests of the transit country from improper discharge of transit goods into its territory without payment of appropriate duties.

c) Lengthy transit initiation especially at ports
Goods intended for transit movement often undergo the same clearance procedures and risk management controls as those intended for importation into the transit country. This increases the time it takes to initiate a transit movement for no value gained in the process.

d) **Freight Forwaders and Customs Brokers**

These play a critical role on behalf of their clients in the logistics value chain and if they are not properly capacitated and regulated, they can easily become a costly barrier to transit operations often causing unnecessary delays and additional costs to transit movement.

e) **Lack of appropriate transit documentation**

Delays in the clearance of transit goods at borders is often caused by lack of the appropriate transit documentation as required by customs and other border control agents requiring these to be obtained or rectified whilst the goods and vehicle remain at the border.

f) **Fragmented insurance and risk mitigation system**

The absence of a single insurance and risk mitigation system along a transit corridor results in the requirement for obtaining insurance in each of the transit countries along a corridor which process is lengthy and more costly and causes delays that could easily be avoided.

g) **Other barriers**

Other barriers that have a negative impact to an effective transit system include lax regulations for transit operators that compromise service quality; unnecessary protection of national operators by transit corridor countries making transit operations uncompetitive; different vehicle loading standards and driver requirements resulting in the need to adjust loading at each border or payment of heavy fines for non-compliance; poor communication between key transit transport stakeholders that often leads to unscheduled and unnecessary stops; and unilateral actions by transit corridor countries that are often in conflict with the requirements in other countries can seriously paralyse efficient transit movement.

4.2.2 Related to availability of transport services along the transit corridor:

a) **Freight allocation systems**

The prevalent system of freight allocations and transit transport permits prevalent on many of the transit corridors creates inefficient utilization of available transport resources and an uncompetitive transport environment which is costly to transit trade.

b) **Use of convoys to escort vehicles and numerous checkpoints**

The practice of escorting transit vehicles by customs officials through the transit country to ensure that no improper discharge of goods in the transit country takes place is a major barrier to an efficient transit system. This is more so when coupled with numerous security and other vehicle and load checks that often occur on transit corridors illegally for rent seeking purposes.
c) **Transit fees**
Transit fees charged along corridors in various legal and illegal forms add to the cost of transit trade and countless delays as payments are made at various sections of the corridor.

d) **Prolonged border crossing formalities and delays**
Poorly structured border control formalities that do not segregate transit traffic from the rest, lack of ICT based processing systems, poor coordination between border officials of the two countries, shortage of personnel, inadequate infrastructure and handling facilities, etc., all contribute to the numerous delays that occur at the border posts.

e) **Prolonged dwell time**
The time that vehicles spend at the port of entry before they are loaded for transit movement is often prolonged by an inefficient cargo allocation system, poor cargo handling facilities, poor communication system, exorbitant handling and demurrage fees amongst others.

4.3 **Developing an Effective Transit System**
In addition to addressing the barriers to an effective transit system wherever they exist, the imperatives for the successful development and implementation of an effective transit system include the following fundamentals:

a) Political will to synchronise national objectives to the regional objectives in developing, implementing and facilitating transit transport movement through the transit country.

b) Multi–stakeholder (both public and private sector) involvement and participation in addressing the identified barriers.

c) A Regional Transit regime based on a single seamless procedure.

d) An AEO programme incorporating segregated traffic clearance channels, especially for transit cargo, based on risk management systems.

e) Harmonized regulatory frameworks and procedures for transit traffic based on international transit agreements for all the countries along a transit corridor.

f) Simplification and harmonization of transit procedures and elimination of NTBs to allow for free movement of transit traffic and shorter transit time in order to improve and increase transit trade competitiveness.

g) Implementation of cross-border ICT and ITS systems and technologies that monitor movement of transit vehicles in the context of a smart corridor concept.
MODULE 5
TRANSIT CORRIDOR AGREEMENTS: BACKBONE OF INTEGRATION

By Philippe Cabanius

Table of Contents

Worldwide Conventions in the Field of Transport & Customs .............................................. 3
1 Transit Policy Basic Principles ............................................................................................. 3
  1.1 Freedom of transit ........................................................................................................ 3
  1.2 The General Agreement on Tariffs and Trade (GATT, 1947) of the World Trade Agreement (WTO) ................................................................................................. 4
2 International Conventions in the Field of Road Transport .............................................. 5
  2.1 Fifty-five International Conventions in the field of transport have been prepared under the auspices of the UN ECE .............................................................................. 5
  2.2 Three conventions are the most important ................................................................... 6
3 International Conventions in the Field of Customs .............................................................. 7
4 Bilateral, Regional & Corridor Transit Agreements .............................................................. 8
5 Transit Agreements Situation in Africa ............................................................................... 8
6 Negotiation of a Trade Transport Transit Agreement ...................................................... 9
  5.1 Prior steps towards trade transport transit agreements ............................................. 9
  5.2 Mechanism for Consultation and Consensus Building ............................................. 11
  5.3 Establishment of a Monitoring and Coordinating Authority .................................. 12
6 Annexes .............................................................................................................................. 14
  Annex 1 ............................................................................................................................. 14
  Annex 2 ............................................................................................................................. 16
As mentioned under Module 4, international trade requires for most African land locked countries, the crossing of goods across and through territory of other states. It is an essential condition for their access to regional and international markets and their integration into the African and the international community.

As a first step towards establishing transit corridor routes, landlocked countries have traditionally developed bilateral transit agreements with neighboring countries to overcome their geographical constraints. Landlocked countries need such agreements with not only their immediate neighbors, but with also all other transit countries en route to the markets for their goods.

The agreements covering road transport stipulate, the terms and conditions under which can transport providers can carry goods along the corridor, the preferred route that can be used, the maximum transit time and the access granted to transport providers from other countries.

The agreements covering trade stipulate the requirements for moving goods under bond either into or across the countries, the documentation required for clearing import and export cargoes and the procedures involved in checking the documents and cargo.

Moreover, in order to negotiate a framework for efficient and cost effective transport in transit operations, landlocked countries and transit countries have recognized that their agreements should be brought in conformity with international principles. In general, specific references to existing international conventions and international agreements have been made and specific provisions were incorporated.

Similarly, many conventions, protocols adopted by the RECs have been inspired explicitly or not by these Worldwide Conventions in the field of transport and customs.
Worldwide Conventions in the Field of Transport & Customs

1 Transit Policy Basic Principles

1.1 Freedom of transit

Freedom of transit, as a principle in international law, is the basic principle of any transit policy defined as movement of persons and goods from one sovereign state to another. It derived from several international conventions which establish the freedom of transit through the territory of each contracting party and particularly the right of access to the sea for States having no sea coast:

- the Conventions and Statute on Freedom of Transit (Barcelona Transit Agreement) of 1921;
- the Convention on the high Sea (Geneva) of 1958;
- the Convention on Transit Trade of Land Locked States (New York) of 1965, and,

However, one point worth noting is the meaning given by these conventions to the principle of Freedom of Transit/Right of Transit.

The international community does not recognize any absolute extra-territorial right of a country in any part of the sovereign domain of other countries, hence it does not regard right of transit as an unconditional right. Whilst enjoying freedom of transit, there is also a right for the transit state to set requirements for granting access or transit rights. Such access and transit rights regulate the terms and modalities of the exercise of this freedom and are subject to bilateral or multilateral transit agreement negotiations.

Two principles are at the core of a transit agreement:

a) The transit countries shall not exercise any discrimination with regard to the country of origin of the goods, the country where they arrived or the country of final destination, nor any circumstances relating to the ownership of goods, or the means of transport used and their country of registration.

b) No duties, taxes or charges of any kind, whether national, provincial or municipal, and regardless of their designations and purposes, shall be levied on traffic in transit, except charges derived from sales and for services rendered, or charges levied on the use of toll roads and bridges, generally applicable for traffic in the territories of the Contracting Parties, and administrative expenses entailed for transit traffic.

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1 Principles of law are distinct from laws and regulations. They constitute the higher and more general norms that lay the foundations of and influence other norms, including laws.
1.2 The General Agreement on Tariffs and Trade (GATT, 1947) of the World Trade Agreement (WTO)

The GATT established in 1947 was “directed (...) to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce” (Preamble)

Article V of the General Agreement on Tariffs and Trade provides for Freedom of Transit. It states, inter alia, that “There shall be freedom of transit through the territory of each Contracting Party, via the routes most convenient for international transit, for traffic in transit to or from the territory of other Contracting Parties. No distinction shall be made which is based on the flag of vessels, the place of origin, departure, entry, exit or destination, or on any circumstances relating to the ownership of goods, of vessels or of other means of transport. (GATTS article V.2)

It states further that “except in cases of failure to comply with applicable customs laws and regulations, such traffic coming from or going to the territory of Contracting Parties shall not be subject to any unnecessary delays or restrictions and shall be exempt from customs duties and from all transit duties or other charges imposed in respect of transit, except charges for transportation or those commensurate with administrative expenses entailed by transit or with the cost of services rendered” (Art.V.3).

Finally, it establishes with respect to all charges, regulations and formalities, in connection with transit that each contracting party shall accord to traffic in transit “no less favorable than the treatment accorded to traffic in transit to or from any third party” (Art V. 5).

To summarize, Article V of GATT calls on the Contracting Parties on one hand to provide adequate transport and related infrastructure for transit on the “routes most convenient for international transit” and on the other hand to ensure that such transit traffic is not subject to unnecessary delays or restrictions due in particular to customs and administrative regulations.

The 1947 GATT remains applicable under the World Trade Organization (WTO) established in 1994 to replace the GATT. These rules are however binding only for WTO member countries vis-à-vis other WTO member countries.

Most African countries having already ratified the GATT became members of the World Trade Organization between 1995 and 1997. As members of the WTO, and in accordance with Article V of the GATT, the African countries have to grant freedom of transit to any other contracting member of WTO.
2 International Conventions in the Field of Road Transport

2.1 Fifty-five International Conventions in the field of transport have been prepared under the auspices of the UN ECE.

They are classified as follows:

1. Transport infrastructure
2. Road traffic and road signs and signals
3. Road vehicles
4. Other legal instruments related to road transport
5. Border crossing facilitation
6. Transport of dangerous goods
7. Transport of perishable foodstuffs

A list of twenty-one of these international agreements and conventions is given in Annex 1.

The UN ESCAP Commission recognizing that harmonized transport facilitation measures at the regional and international levels are a perquisite for enhancing international transport has recommended that the ESCAP members and associated members consider the possibility of acceding to the following seven international conventions which provide the international framework for rapid cross border movements of goods and commercial vehicles.

<table>
<thead>
<tr>
<th>Box 1: The ESCAP Seven Recommended International Conventions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Facilitation of International Transport of Goods</strong></td>
</tr>
<tr>
<td>a) Customs transit system</td>
</tr>
<tr>
<td>2.1 UN Customs Convention on the International Transport of Goods under Cover of TIR Carnets (the TIR Convention, 1975)</td>
</tr>
<tr>
<td>2.2 Customs Convention on Containers,(1972)</td>
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<tr>
<td>b) Border control of goods</td>
</tr>
<tr>
<td><strong>II. Facilitation of the Passage of Road Vehicles</strong></td>
</tr>
<tr>
<td>2.4 Customs Convention on the Temporary Importation of Commercial Road Vehicles, (1956)</td>
</tr>
<tr>
<td><strong>III. Facilitation of International Transport Operations</strong></td>
</tr>
<tr>
<td>a) regulations for international road traffic</td>
</tr>
<tr>
<td>2.5 Convention on Road Traffic, (Vienna Convention, 1968)</td>
</tr>
<tr>
<td>2.6.Convention on Road Signs and Signals, (Vienna Convention, 1968)</td>
</tr>
</tbody>
</table>

2 Under this Module is reviewed the International Agreements in the field of road transport and customs. Reference to International agreements in the field of railways, river transport, and maritime transport are made under the review of each modes.

3 ESCAP resolution 48/11 “Road and Rail Transport Modes in Relation to Facilitation Measures “on 23 April, 1992.
b) transport documents and liabilities of road carriers

2.7 Convention on the Contract for the International Carriage of Goods by Road, (CMR 1956)

Few additional Road Conventions could be also considered:

2.8 New York Customs Convention on the Temporary Importation of Private Road Vehicles. (1954)
2.9 Geneva Convention on the Taxation of Road Vehicles Engaged in International Goods Transport (1956)
2.10 Agreement concerning the International Carriage of Dangerous Goods by Road ADR (1957)
2.11 The APT Agreement governing international transport of perishable foodstuffs and special vehicles (1970)

See 2: reviews each of these conventions and list of African Stated having ratified them.

2.2 Three conventions are the most important

1 The UN Conventions on the International Transport of Goods under the cover of TIR Carnet. The TIR convention enables a vehicle or a container covered by a specific customs document, the TIR carnet, to journey from its point of departure to its point of destination without undergoing any customs examination when crossing intermediate frontiers.

Box 2: The Five “Pillars” of the TIR Regime

- Vehicles with sealable load compartments, so that goods cannot be removed or added during the transit, or if they are, tampering will be clearly visible.
- A uniform international guarantee that covers Customs duties and taxes that would be payable if the goods remained in the country of transit – this is in fact a chain of national guarantees backed by a last-resort guarantee issued by a Swiss insurance company, at the behest of the International Road Transport Union (IRU). The standard coverage is $50,000 or EUR 65,000 per container, though for alcohol and tobacco a guarantee of up to $200,000 is also available. The guarantee is valid for up to four years.
- TIR carnets, a standard international document issued by the IRU and accepted by the Customs authorities of every member country of the TIR convention, which is a legal instrument backed by the United Nations.
- National associations of transport operators, who screen their members’ access to the TIR system on the basis of professional and financial criteria of quality, sell the carnets to their members, and manage the national guarantee system.
- International and mutual recognition of Customs control measures: The countries of transit and destination accept control measures (e.g. sealing a container) taken by their counterparts in the country of departure.

Source: International Road Union

2 The Convention on the Contract for the International Carriage of Goods by Road (called CMR convention - 1965) sets out the terms and conditions under which a road hauler carries
goods for hire and rewards on an international journey. It also determines the liability of the haulers and the responsibility of the consignor. The CMR Convention is governing the majority of international road transport in Europe.

3 The International Convention on the Harmonization of Frontier Control of Goods (1982) is a statement of good practices and prescribes general inspection practices and co-operation procedures between adjacent countries. It aims at minimizing border delays by reducing the requirements for completing formalities, the number and duration of all types of controls.

Reference could be made also to the Geneva Conventions on International Multimodal Transport (1980) but not yet in force because of an insufficient number of signatures and ratifications.

3 International Conventions in the Field of Customs

In the custom context, transit is a procedure under which goods are transported through countries from one customs office to another under customs control and without paying import duties or other taxes.

The most important conventions in the field of customs are the following:

<table>
<thead>
<tr>
<th>Box 3: Customs Conventions</th>
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</thead>
<tbody>
<tr>
<td>3.1 Convention on Establishing a Customs Co-operation Council, signed in Brussels in 1950 and Annexes in 1967</td>
</tr>
<tr>
<td>3.2 International Convention on Simplification and Harmonization of Custom procedures (Kyoto Convention), 1974</td>
</tr>
<tr>
<td>3.3 The Revised KYOTO Customs Convention (1966)</td>
</tr>
<tr>
<td>3.4 International Convention on Mutual Assistance for the Prevention, Investigation and Repression of Customs Offences (Nairobi convention) 1980</td>
</tr>
<tr>
<td>3.5 Convention on the Harmonized Commodity Description and Coding System, 1988</td>
</tr>
<tr>
<td>3.6 Convention on Temporary Admission (Istanbul Convention) 1993</td>
</tr>
<tr>
<td>3.7 Convention on the Valuation of Goods for Customs Purposes (BDV)</td>
</tr>
<tr>
<td>3.8 Customs Convention on Containers (1972)</td>
</tr>
</tbody>
</table>

Nearly all the African States are members of the World Customs Organization an intergovernmental organization headquartered in Brussels (Belgium).

The WCO’s primary objective is to enhance the efficiency and effectiveness of member customs administrations and plays a leading role in the development, promotion and implementation of modern customs systems and procedures.

In order to achieve its objectives, the WCO has adopted a number of customs instruments. The most important one is:

The International Convention on the Simplification and Harmonization of Customs Procedures (revised Kyoto Convention or RKC). The Kyoto Convention originally adopted in 1974 was

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4 See Annex 2 for a review of these different conventions and list of African States having ratified them.
subsequently revised in 1999. The revised Kyoto Convention came into force in 2006 as the blueprint for modern and efficient Customs procedures in the 21st century in order to provide international commerce with the “predictability and efficiency that modern trade requires”.

Principles and key elements of the Revised Kyoto Convention are listed in the following Box

<table>
<thead>
<tr>
<th>Box 4: Revised Kyoto Convention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Recommended principles that a modern Customs administration should implement</strong></td>
</tr>
<tr>
<td>o Transparency and predictability of Customs actions</td>
</tr>
<tr>
<td>o Standardization and simplifications of goods declarations and supporting documents</td>
</tr>
<tr>
<td>o Continuous development and improvement of Customs control techniques with minimum necessary to ensure compliance with regulations</td>
</tr>
<tr>
<td>o Simplified procedures for authorized persons</td>
</tr>
<tr>
<td>o Maximum use of information technology</td>
</tr>
<tr>
<td>o Partnership approach between Customs and the trade</td>
</tr>
<tr>
<td><strong>2. Key elements to be applied by modern Customs administrations</strong></td>
</tr>
<tr>
<td>o Maximum use of automated systems</td>
</tr>
<tr>
<td>o Use of risk management techniques (including risk assessment and selectivity of controls) and audit-based control</td>
</tr>
<tr>
<td>o Use of pre-arrival information to drive programs of selectivity</td>
</tr>
<tr>
<td>o Use of electronic funds transfer</td>
</tr>
<tr>
<td>o Coordinated interventions with other border agencies</td>
</tr>
<tr>
<td>o Making information on Customs requirements, laws, rules and regulations easily available to anyone</td>
</tr>
<tr>
<td>o Providing a system of appeals in Customs matters</td>
</tr>
<tr>
<td>o Formal consultative relationships with the trade</td>
</tr>
</tbody>
</table>

Source: World Customs Organization (WCO)

Bilateral, Regional & Corridor Transit Agreements

4 Transit Agreements Situation in Africa

Numerous bilateral transit agreements (between two countries) and in some cases multilateral (between several countries) agreements aiming at regulating the terms and conditions under which transit transport can take place and transport operators could operate in each other’s territory.

Making reference to existing international practices and rules, bilateral agreements generally contain provisions determining the scope and application of the freedom of transit, designating transit routes (limited to certain routes or not), regulating permits/quotas, procedures and documents, visas, driving licenses, cross border cooperation, dispute settlement, technical specifications of vehicles and

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5 Three months after 40 Contracting Parties to the Kyoto Convention (1974) signed the Protocol of Amendment without reservation of ratification and have deposited their instrument of ratification or accession.
technical certifications, motor vehicle third party insurance, customs transit issues. Provisions on road safety and security with a view to mitigate the risks of accidents, nuisance to population, and secure financial viability in case of accidents, are sometimes also included.

In parallel to the bilateral agreements, the trend in the recent years is to move towards more comprehensive solutions at the regional level with a view to establishing integrated and harmonized transit and transport systems with the objective of encouraging regional economic integration.

These regional agreements cover some elements such as regional harmonization of Customs transit procedures and documents, regional cooperation between authorities in particular at border posts and regional Customs transit guarantee systems6.

A complementary approach to transit agreements which has evolved during recent years is transit corridors and cluster arrangements. Servicing several countries along a same corridor, a transit corridor agreement address the development of both good physical infrastructure and harmonized and simple procedures with the involvement of all potentially concerned stakeholders public and private7.

In Africa, however, a large number of signed agreements to improve transit conditions have been signed but have either only partially or never been implemented, failing to create change and to attain the agreement’s objectives.

One of the reasons of this failure is the lack of consistency of most agreements. For example, it is not usual for a country to have agreements that are quite different with each of its neighbors. Containing mutually incompatible provisions, these different agreements are likely to impede rather than facilitate transit transport when traffic need to cross more than two countries.

In addition, and in practice, the scope of these agreements reflects often a balance between various interests of the different countries that are not always in accord with the general principles of customs transit and not necessarily conducive to overall transit efficiency.

5 Negotiation of a Trade Transport Transit Agreement

5.1 Prior steps towards trade transport transit agreements

Any process of designing a new transit agreement, or re-engineering an existing one, should begin with an analysis of the specific constraints encountered on this particular corridor.

If the agreement already exists, efforts should be made by all parties to the agreement to identify the reasons why it does not fulfill its purpose and to design the conditions to make it operational.

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6 Examples of sub-regional regional agreements relating to transit transport: the Association of Southeast Asian Nations (ASEAN) Framework Agreement on the Facilitation of Goods in Transit, the Greater Mekong Sub-region (GMS) for the Mitigation of Non-physical Barriers to Cross Border of Goods and People, the Economic Cooperation Organization (ECO) Transit Transport Framework Agreement, the Transport Corridor Europe-Caucasus-Asia (TRACECA) routes, the Southern African Development Community (SADC) Transport Protocol, the Southern African Customs Union (SACU) on road transport.

7 The Walvis Bay corridor and the Maputo Corridor are examples of existing cross-border arrangements aiming at increasing cooperation amongst corridors users, service providers and economic activities generated along the corridor.
Therefore, it is important that those countries which seek the right of transit and those countries which grant such rights to engage in a dialogue designed to establish fair and equitable terms and conditions for transit transport operations.

A mutually advantageous arrangement will be sustainable as it is in the interest of the countries concerned to support it. On the contrary, any perception of unfairness or resort to unilateral actions will only lead to friction and disruption.

In particular, the following points needs to be targeted:

i. The political will of the transit and landlocked countries to establish an efficient transport transit corridor and the readiness and ability of the administrations to create a favorable institutional environment;

ii. The commercial interest of shippers and transport providers, from both the transit and landlocked countries;

iii. The management and administration of the traffic in transit;

iv. The Customs tariffs in force in the countries along the transport transit corridor, and,

v. The status and conditions of the transport and communications infrastructure in the countries along the transport transit corridor.

Based on this review of the existing situation and taking into account the objective of the agreement, more effective and operational measures could be elaborated, including:

1) institutional measures and administrative support (e.g. establishment of a corridor trade and transport committee);

2) infrastructure-supporting developments (e.g. communications equipment);

3) use of information technologies for customs control purposes, etc.

4) practical measures (e.g. printing of manuals and documents for transport users and providers in both countries); and,

5) establishment of adequate training programs covering the agreement and the new procedures, it implies, designed for government officials and private sector interests.

<table>
<thead>
<tr>
<th>Box 5: Principles to Support an Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficiency</strong>: to ensure the efficient (and effective) administration of transport in transit to facilitate the movements of goods in transit</td>
</tr>
<tr>
<td><strong>Simplicity</strong>: to ensure the simplification and harmonization of all transport, trade and customs regulations, procedures and requirements for the purpose of facilitation of goods in transit through the countries</td>
</tr>
<tr>
<td><strong>Transparency</strong>: to make all laws, regulations, procedures and administration notifications available to public in a prompt, transparent and readily accessible manner.</td>
</tr>
<tr>
<td><strong>Curbing smuggling</strong>: to develop an effective cooperation between the two countries for curbing smuggled goods in line with the Revised Kyoto Convention.</td>
</tr>
</tbody>
</table>
5.2 Mechanism for Consultation and Consensus Building

At the time of negotiating a transit agreement, it is essential that Government officials from both contracting countries clearly understand the objective of the agreement e.g. "to facilitate the movements of goods and commercial vehicles".

The positions of the countries may be quite diverging or conflicting at the start of the negotiations. Therefore, the objective of the negotiations process is to seek out the provisions and modalities that may bring together, with a reasonable degree of harmony, the diverging and, possibly, conflicting views of the parties.

This requires patience and understanding. More importantly, it requires a thorough and complete knowledge of the facts, problems and potentials of the transit between the two countries, as well as of their respective national regulatory framework (laws, government or ministerial directives and orders) which will condition the effective implementation of the provisions of the agreement.

This must be complemented by the capacity to be flexible enough to recognize, develop, and accept useful alternatives possibly proposed by the other party.

The negotiation process should include the players the most concerned in improving trade and transport of any given country, i.e. the public and the private sectors:

- The public sector includes authorities at the national, regional and local level responsible for the draft and enforcement of the laws and regulations which affect transport and trade, as well as for the planning, construction and maintenance of the transit transport related infrastructure; and,

- The private sector which includes not only the traders and other importers/exporters but also all the transit service providers (road and rail carriers, freight forwarders, shippers, banks, insurance companies, etc.).

As mentioned in a note by the UNCTAD secretariat:

"Concerning (1), the public sector, in many countries, Governments have no specific entity dealing with international transport and transit issues. Different departments of ministries or even different ministries deal with specific but fragmented aspects (sea, air, road, and rail) of such issues. (...) As a result, there is very little awareness within public offices of the importance of national transport in the context of international trade (...)"

"Concerning (2), the private sector, trade and industry associations often lack capacity and resources to articulate policy options effectively and to engage in effective dialogue with governments. This is because they lack resources (both financial and expertise) to enable them to organize and improve networking and information sharing amongst them. Consequently, they tend to be reactive rather than proactive in their interactions with Governments and in contributing to the shaping of national and regional policies."

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“Coordination and cooperation between (1) the public and (2) the private sectors tends to be weak, too. Working relations between public offices, on the one hand, and private enterprises, on the other, may be marked by mistrust, if the services try to defend public interest; or by complicity, when they yield to entreaties. The public sector is completely national, whereas the private sector tends to be partly foreign. Any strategy for improved coordination will usually have to involve a profound change in the mind-set of both parties.”

Furthermore, the agreement must not only have the cooperation between the public and private sectors within a given country, but also between the implementing government agencies of each country entering in the negotiation of a transit transport agreement and between the shippers, carriers and others transit transport related service providers of both the landlocked and the transit countries.

A spirit of cooperation must be created. “The spirit of cooperation rests on the joint effort of public and private sectors in each country, plus strong will in these sectors to collaborate across borders.”

In other word, the negotiation of a transit agreement and then its implementation require the establishment of bilateral or multilateral coordinating structures to cope with fragmented national efforts and resources and to secure the coherent implementation of the national initiatives within a cross border transit transport corridor perspective.

For instance, UNCTAD has suggested strengthening the institutional framework on the basis of the concept of National Trade and Transport Facilitation Committee (NTTFC).

Such a committee brings together representatives of all public and private parties concerned with international trade and transport facilitation in a country: government entities, services providers and transport users.

Established as a consultative body, an NTTFC serves as a national forum where the different points could be addressed: (a) the political will of the transit and landlocked counties to establish an efficient transport transit corridor and the readiness and ability of the administration to create a favorable institutional environment; (b) the commercial interest of shippers and transport providers, from both the transit and landlocked countries; (c) the regulation, management and administration of the traffic in transit; (d) the Customs tariffs in force in the countries along the transit transport corridor; and, (e) the status and conditions of the transport and communications infrastructure in the countries along the transit transport corridor.

Representatives of donors and international funding agencies should also be invited to participate. Indeed, they may be called upon to provide the financial resources for some physical investment or technical assistance in support of the negotiations of the Agreement. Their assistance could serve as a further incentive for the negotiating parties to reach an agreement.

### 5.3 Establishment of a Monitoring and Coordinating Authority

A successful agreement becomes effective through adequate control and enforcement.

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9 Expert Meeting idem paragraph 57.
In fact, the effectiveness of a bilateral Agreement depends upon the level of support and commitment given to the Agreement by the two signatory countries.

This requires close cooperation, within each signatory country and between the countries, among the transport authorities, the Customs administrations, the law enforcement authorities, and the private sector directly concerned by the various provisions covered in the agreement.

The establishment of ad-hoc mechanisms for monitoring the implementation of a bilateral (or multilateral) agreement clearly offers a double advantage:

a) to highlight the commitment of the countries to fully implement the agreement;

b) to ensure the effective functioning of the agreement.

The rational for establishing a monitoring and coordinating authority is to have an entity responsible for considering cross border matters and ensuring that the two contracting parties apply the provisions of the Agreement. It should also guarantee a uniform interpretation of the Agreement.

Other responsibilities should include: identifying issues, formulating the general principles and policies governing the corridor, and considering measures aimed at adapting the bilateral agreement to changing needs.

Countries willing to ensure that the transit agreements they have just signed will be effectively implemented should give priority to the establishment and funding of the relevant monitoring and coordinating authority.

A successful example of such a coordinating authority is given by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) composed of the Ministers responsible for transport matters in each of the participating states and their Permanent Secretaries and renamed in 2007 as the Northern Corridor Coordination Authority (NCCA) with the creation of two new institutions: the Specialized Committees responsible for preparing implementation strategies for corridor operations; and the Public-Private Partnership Committee composed of public and private sector persons and organizations dealing with interstate transport and transit issues along the corridor responsible for identifying and addressing problems within its areas of operations and making recommendations for review by the Council of Ministers.

10 The new Northern Corridor Transit & Transport Agreement was signed in Nairobi (Kenya) on October 2007 between the Governments of Burundi, Democratic Republic of Congo, Kenya, Rwanda and Uganda. It entered into force on December 2012. This new agreement extends the mandate and scope of the 1985 Northern Corridor Transit Agreement (NCTA). It acknowledges the importance of developing along the Northern Corridor a transit system that is economical, safe and environmentally sustainable with reference to the international trends calling for public-private partnership and sustainable environmental development.
## Annexes

### Annex 1

**ECE International Agreements**

<table>
<thead>
<tr>
<th>I. Facilitation of International Goods Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Customs transit system</td>
</tr>
<tr>
<td>UN Customs Convention on the International Transport of Goods under the Cover of TIR Carnets (TIR Convention) 1975</td>
</tr>
<tr>
<td>Customs Convention on Containers 1972</td>
</tr>
<tr>
<td>Customs Pool Containers, 1994</td>
</tr>
<tr>
<td>(b) temporary importations procedure</td>
</tr>
<tr>
<td>ATA Convention (Convention of the World Customs Organization –WCO) 1962</td>
</tr>
<tr>
<td>(c) Border controls of goods</td>
</tr>
<tr>
<td>Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP), 1970</td>
</tr>
<tr>
<td>(d) Transport of dangerous foods</td>
</tr>
<tr>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) 1957</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Facilitation of the Passage of Road Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Temporary importation of vehicles</td>
</tr>
<tr>
<td>Convention on the Temporary Importation of Private (1954) and Commercial Road Vehicles, (1956)</td>
</tr>
<tr>
<td>(b) International Véhicule Insurance</td>
</tr>
<tr>
<td>Intra-European system of insurance of motorists against third-party risks ( “Green Card” system)</td>
</tr>
<tr>
<td>(c) Taxation of road vehicles in international traffic</td>
</tr>
<tr>
<td>Conventions on the taxation of Road Vehicles engaged in International Passenger Transport and in International Goods Transport (1956)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Facilitation of International Transport Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Regulations for international road traffic</td>
</tr>
<tr>
<td>Convention on Road Traffic (Geneva Convention) 1949</td>
</tr>
<tr>
<td>Convention on Road Traffic (Vienna Convention) 1968</td>
</tr>
<tr>
<td>Convention on Road Signs and Signals (Vienna Convention) 1968</td>
</tr>
<tr>
<td>European Agreement on Road Traffic</td>
</tr>
<tr>
<td>European Agreement on Road Signs and Signals</td>
</tr>
<tr>
<td>(b) Transport documents and liability of road carriers</td>
</tr>
<tr>
<td>Convention on the Contract for the International Carriage of Goods by Road (CMR) 1956</td>
</tr>
<tr>
<td>Protocol to CMR , 1978</td>
</tr>
<tr>
<td>(c) Regulations of hours of driving and records</td>
</tr>
<tr>
<td>European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport (AETR ), 1970</td>
</tr>
<tr>
<td>Agreement Concerning the Adoption of Uniform Conditions for Periodical Inspection of Wheeled Vehicles and the Reciprocal Recognition of such Inspections (Vienna ) 1997</td>
</tr>
<tr>
<td>(d) Multilateral Infrastructure Agreements</td>
</tr>
<tr>
<td>European Agreement on Main International Traffic Arteries (AGR) 1975</td>
</tr>
<tr>
<td>European Agreement on Important International Combined Transport Lines and Related Installations (AGTC) 1991</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>IV Customs Convention</strong></td>
</tr>
<tr>
<td>Convention on Establishing a Customs Co-operation Council, signed in Brussels on 1950; and Annexes on 1967</td>
</tr>
<tr>
<td>International Convention on Simplification and Harmonization of Custom procedures (Kyoto Convention), 1974</td>
</tr>
<tr>
<td>The Revised KYOTO Customs Convention (not enforced yet)</td>
</tr>
<tr>
<td>International Convention on Mutual Assistance for the Prevention, Investigation and Repression of Customs Offences (Nairobi Convention) 1980</td>
</tr>
<tr>
<td>Convention on the Harmonized Commodity Description and Coding System, 1988</td>
</tr>
<tr>
<td>Convention on Temporary Admission (Istanbul Convention) 1993</td>
</tr>
<tr>
<td>Convention on the Valuation of Goods for Customs Purposes (BDV)</td>
</tr>
</tbody>
</table>
Annex 2

Worldwide Conventions Related to Transport & Trade Signed by African Countries 11

1. Freedom of Transit

1.1 Barcelona Convention and Statute on Freedom of Transit (1921)

The 1921 Convention is still in force with 42 parties who largely were members of the League of Nations in 1921. Nigeria, which is not a land-locked country, ratified the Convention in 1967 like Rwanda (1965), Lesotho (1973), Swaziland (1969), and Zimbabwe (1998).

But, even for those African countries who did not ratify the Convention, it is an important document as it sets forth the basic principles of any transit policy, especially the transit policies that will be developed and implemented for the benefit of landlocked States. For instance, the preamble to the 1985 Northern Corridor Transit Agreement between Kenya and the landlocked States of Burundi, Rwanda, Uganda and Democratic Republic of the Congo makes express reference to it.

1.2 Geneva Convention on the High Seas (1958)

Article 3 of the 1958 Geneva Convention on the High Seas stipulates that States having no seacoast should have free access to the sea, by common agreement with states situated between the sea and such landlocked State.


A fair number of African coastal States have therefore not recognized the rights of the landlocked States through this Convention. Conversely, some landlocked States have not seized the opportunity offered here to see their right of access to the sea given recognition.

1.3 New York Convention on Transit Trade of Land-locked Countries (1965)

The Convention was concluded in New York on July 8, 1965. It stipulates that states having no seacoast should have access to the sea in all circumstances and for every type of goods, based on common agreement with the transit state. This formulation is less than originally requested by a group of landlocked countries from all continents (including Mali and Zambia) that wanted right of access be not dependent on bilateral agreements with coastal States; they would have preferred a self-enforcing measure.

In force since June 9, 1967, the Convention was ratified or acceded to by Burkina Faso (1987), Burundi (1968), the Central African Republic (1989), Chad (1967), Lesotho (1969), Malawi

(1966), Mali (1967), Niger (1966), Nigeria (1966), Rwanda (1968), Senegal (1985), Swaziland (1969), and Zambia (1966). Cameroon, Sudan, and Uganda signed it in 1965 but did not ratify. This reflects a general suspicion of the coastal States toward the recognition of a fundamental right of preference for the landlocked States through a multilateral convention and a preference to leave to bilateral or regional agreements the conditions for exercise of such a right (Nigeria position).


The Convention devotes an entire chapter to landlocked States (Part X) : “landlocked States shall enjoy freedom of transit through the territory of transit States by all means of transport. The terms and modalities for exercising freedom of transit shall be agreed between the landlocked States and transit States concerned through bilateral, sub regional or regional agreements “ (art 125). “Means of transport in transit and other facilities provided for and used by landlocked States shall not subject to taxes or higher charges than those levied for the use of means of transport of the transit State” (art 127).

As of January 2015, 166 countries and one international organizations (European Union) have joined the Convention, including most African countries whether landlocked or coastal. Many have joined with reservations about several of its provisions.

The reason for its large adhesion can be found in the possibility to resolve disputes before the International Tribunal for the Law of the Sea, based in Hamburg (Germany), viewed as a guarantee.

The following landlocked African countries have ratified or signed the Convention


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12The Convention introduced a number of provisions. The most significant one was the definition of exclusive economic zones (EEZ): 200 nautical miles or 370 km from the baseline. Within this area, the coastal nation has sole exploitation rights over all natural resources.
Rwanda (1982), and Libya (1984).

1.5 The General Agreement on Tariffs and Trade (GATT-1947)/the World Trade Organization (WTO)

Art V of GATT stating “freedom of transit through the territory of each Contracting Party” remains applicable under the WTO established in 1994 to replace GATT.

The following African countries are WTO members: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cabo-Verde, the Central African Republic, Chad, Democratic Republic of the Congo, Côte d’Ivoire, Djibouti, Arab Republic of Egypt, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe and by end of 2015, Ethiopia, Liberia, Algeria, the Comoros, Equatorial Guinea, Libya, São Tomé and Principe, the Seychelles, and Sudan are observers at the WTO.

Most African countries having already ratified the GATT became members of the World Trade Organization between 1995 and 1997 with the exception of Cabo Verde which became a member only in 2008.

Ethiopia and Liberia, which were observers at the WTO have submitted an application to accede to WTO respectively in 2003 and 2007 and are both expected to join the organization by end of 2015.

2. Twelve Recommended Road Conventions


The objective of the TIR Convention has been to both improve transport operations and simplify and harmonize administrative formalities in the field of international transport, particularly at frontiers.

The Convention has been enforced since 1960 and amended several times. Largely enforced in Europe, the Maghreb, and the Middle East, including Iran, and ratified in North America, even in Chile, Republic of Korea, and Indonesia, it has remained almost foreign to Africa and as of June 2013, only Algeria (1989), Liberia (2005), Morocco (1983), and Tunisia (1977) have ratified the Agreement.

2.2 Geneva Customs Convention on Containers (1972)

The 1972 Customs Convention on Containers concluded in Geneva on December 2, 1972 under the auspices of the United Nations/International Maritime Organization. Its objective is to permit the fast, easy movement of containers and their temporary admission to countries open to international trade. This Convention superseded the first Customs Convention on Containers, dated May 28, 1956.

The 1972 Customs Convention on Containers was ratified by Algeria (1978), Burundi (1998),

The number of African States that ratified the conventions is insignificant. However, Annex III to Protocol No. 3 attached to the Northern Corridor Transit & Transport Agreement (NCTTA) of 2007 between Burundi, Democratic Republic of the Congo, Kenya, Rwanda, and Uganda stipulates that the Parties to the Agreement undertake to accept transport units (containers) approved in accordance with the 1972 Customs Convention on Containers and its predecessor of 1956. The result is that, for the Corridor, all the countries are bound by the NCTTA, whereas for the rest of their territories Kenya and Uganda are bound by the 1956 Convention and Burundi is bound by the 1972 Convention.


This Convention is a useful complement to the Kyoto Convention. It was concluded on October 1982 and aim is to reduce the requirements for completing formalities as well as the number and duration of controls, in particular by national and international co-ordination of control procedures. Unfortunately for the facilitation of trade in Africa, it has been ratified only by South Africa (1987), Lesotho (1988), Liberia (2005), Tunisia (2009), and Morocco (2012). The other Parties are mainly European States


This Convention was concluded in Geneva on May 18, 1956.

The Convention refers specifically to the 1954 New York Convention with the intention to apply similar provisions to the temporary importation of commercial vehicles. It provides that commercial vehicles shall be granted temporary admission without payment of import duties and taxes, subject to their re-exportation.

Each Contracting Party may authorize associations, such as those affiliated with an international organization, to issue the temporary importation papers necessary for the enforcement of the Convention. Vehicles damaged beyond repair need not be re-exported, but duties and import taxes shall be paid and the vehicles destroyed or abandoned to the domestic treasury.

The Convention was acceded to by Sierra Leone in 1962 and Algeria in 1963.

2.5 Geneva Convention on Road Traffic (1949 & 1968)

South Africa (1952), Togo (1962), Tunisia (1957), Uganda (1965), and Zimbabwe (1998).

**Vienna Convention on Road Traffic (1968).** A second Convention was concluded on November 8, 1968, in Vienna and came into force in 1977. It was the final act of the 1968 UN Conference on Road Traffic, attended by Government delegations, seven intergovernmental organizations, and 19 nongovernmental organizations. No specific African organization attended the conference.


**2.6 Vienna Convention on Road Signs and Signals (1949 & 1968)**

**Protocol on Road Signs and Signals (1949).** A protocol on road signs and signals was adopted at the same time as the convention. It came into force on December 20, 1953. Burkina Faso (2009), Niger (1968), Rwanda (1964), Senegal (1962), Tunisia (1957), and Uganda (1965) are Contracting Parties to this Protocol.

**Vienna Convention on Road Signs and Signals (1968) On November 8, 1968, the Convention on Road Signs and Signals was also concluded in Vienna; it was intended to replace the 1949 Protocol. The Convention was ratified or adhered to as of June 2013 by the Central African Republic (1988), Côte d’Ivoire (1985), Democratic Republic of the Congo (1977), Ghana (signature only, 1969), Liberia (2005), Morocco (1982), Nigeria (2011), Senegal (1972), the Seychelles (1977), and Tunisia (2004).**

**2.7 Geneva Convention on the Contract for the International Carriage of Goods by Road (CMR, Contrat [de transport] de marchandises par la route) 1956**

The CMR aim is to elaborate uniform conditions of contract for international road transport of goods. It is typically an international transport instrument and does not apply to domestic transport. The CMR was signed in Geneva on May 19, 1956. An additional Protocol allowing the use of an electronic consignment note was signed in Geneva on May 27, 2008, and entered into force on June 5, 2011.

The Convention as an international transport framework has been so successful that it governs an increasing number of contracts for the carriage of goods by road to the Middle East and North Africa. This success is certainly a consequence of its origin as a document elaborated by the profession. Unlike the conventions related to the international carriage of goods by rail, which affect only a limited number of national railways, the CMR is used by thousands of international truck operators. As a result, interpretation of the Convention by national courts has tended to be uniform, a powerful tool for the unification of law.

Only Morocco and Tunisia ratified the Convention and no Sub-Saharan countries. Yet, the CMR has been used as a model for sub regional instruments establishing transit regimes in Africa.
For example (i) the 1996 Libreville Road Transport Convention (\textit{Convention inter- États de transports routier de marchandises diverses}) of the Customs and Economic Union of Central Africa (UDEAC); (ii) The 1996 UDEAC Convention reproduces verbatim the main provisions of the CMR and makes their enforcement compulsory; (iii), the Northern Corridor Transit & Transport Agreement (NCTTA) between Burundi, Democratic Republic of the Congo, Kenya, Rwanda, and Uganda states that the Parties to the Agreement undertake to accept transport units approved in accordance with the 1956 Convention (Annex III to Protocol No. 3); (iv) The CMR seems also to have been used as a model for the 2003 OHADA Uniform Act Relative to the Contracts for Road Transport of Goods.

\textbf{2.8 New York Customs Convention on the Temporary Importation of Private Road Vehicles. (1954)}


\textbf{2.9 Geneva Convention on the Taxation of Road Vehicles Engaged in International Goods Transport (1956)}

The Convention stipulates the exemption from taxes of vehicles imported in the territory of a Contracting Party in the course of international goods transport.

The only Sub-Saharan State to have acceded to this Convention is Ghana (1962).

\textbf{2.10 Agreement concerning the International Carriage of Dangerous Goods by Road ADR (1957)}

The agreement was signed in 1957 under the auspices of the UN Commission for Europe and entered into force on 1968. The key article is the second which say that apart from some excessive dangerous goods, other dangerous goods may be carried internationally in road vehicles subject to compliance with: (i) conditions in particular as regards their packaging and labeling; and, (ii) conditions in particular as regards the construction, equipment and operations of the vehicles subject to compliance with.

Only Tunisia signed the Agreement in 2008.

\textbf{2.11 The APT Agreement governing international transport of perishable foodstuffs and special vehicles (1970)}

Adopted in 1970, the Agreement has for objective to improve the conditions of perishable foodstuffs during carriage, particularly in international trade and to promote the expansion of trade in perishable foodstuffs with the objective of protecting food safety and preventing threats to human health from unsafe food.

Outside UNECE region, Morocco and Tunisia are contracting parties.
ATP applies even if the State where the goods are loaded is not a Contracting Party. For example for a refrigerated consignment shipped from Tunisia to Algeria, ATP would apply even though Algeria is not a Contracting Party.


Multimodal or combined transport entails two or more different modes of transport, such as rail and road, or road, sea, and road. The 1980 Convention offers rules on transport between one country where the goods are loaded and taken in charge by a multimodal transport operator (MTO) appointed for delivery to another country.

The Convention was prepared during two conferences on the subject that met in Geneva in November 1979 and May 1980. Many representatives of professional bodies from the transport industry joined representatives of Governments.

The long preamble to the Convention sets forth the concerns of the Parties to its elaboration: (1) desirability to facilitate international trade and concern for the problems of transit countries; (2) need for equitable rules of liability for multimodal transport operators; (3) need to take into consideration the special problems of developing countries; and (4) need to facilitate Customs procedures.

The Convention is not yet in force because of an insufficient number of signatures and ratifications. Article 36 of this Convention requires the signatures of 30 States before it enters into force. As of March 2014, it was signed, ratified, accepted, or approved by eleven States on different continents. This situation reflects the little consensus on the principles on which the instrument was drafted.


The States of the Customs and Economic Union of Central Africa (UDEAC) drafted and issued their own convention on multimodal transport, whose enforceability is limited to trade between these States or any outside State, shipper, or carrier that may accept its provisions.

Equally, the Northern Corridor Transit & Transport Agreement (NCTTA) in East Africa makes reference to the multimodal Convention, although it is not in force.

3. EIGHT RECOMMENDED CUSTOMS CONVENTIONS

3.1 Customs Cooperation Council (1950)

The Convention Establishing a Customs Cooperation Council was concluded in Brussels on December 15, 1950, by 13 European States, together with a protocol on the Study Group for the European Customs Union. The Customs Cooperation Council is now known as the World Customs Organization as intergovernmental organizations headquartered in Brussels, Belgium.

The Convention was opened for accession by any State as of April 1955. The African States

3.2 The international Kyoto Convention on the Simplification and Harmonization of Customs Procedures. (1974)

This Convention entered into force in September 1974 was seen as the key legal instrument for harmonization of cross-border procedures.

Since then, however, the growth in international cargo, the incredible developments in information technology, and a highly competitive international business environment based on quality service and customer satisfaction, have created conflicts with traditional Customs methods and procedures.

The World Customs Organization (WCO) therefore revised and updated the Kyoto Convention to ensure that it meets the current demands of international trade. The WCO Council adopted the revised Kyoto Convention in June 1999 as the blueprint for modern and efficient Customs procedures in the 21st century.

3.3 The Revised International Kyoto Convention on the Simplification and Harmonization of Customs Procedures (revised Kyoto Convention or RKC) (1999)


The revised Kyoto Convention promotes trade facilitation and effective controls through its legal provisions that detail the application of simple yet efficient procedures.


Although the ratification situation is rather good, the 25 annexes and chapters to the Convention have been meagerly accepted by the Parties, with the notable exceptions of Algeria (24 annexes), Egypt (all 25), Madagascar (23), Mauritius (19), Uganda (all 25), and Zimbabwe (all 25).

This Convention is a follow-up to the 1950 Brussels Convention establishing the Customs Cooperation Council and organizing Customs cooperation. It was concluded in Nairobi on 1977 and entered into force on 1980.

Its objectives are to establish effective cooperation between the Customs entities of States in order to prevent and repress Customs offenses detrimental to the interests of trade and the economic and financial interests of States. The Convention is composed of the main text and 10 annexes, which are integral part of the Convention. Each annex describes an area of cooperation and assistance:

- Assistance by a Customs administration on its own initiative
- Assistance in the assessment of dues and taxes
- Assistance related to controls and inquiries
- Appearance of Customs officials at a court abroad
- Presence of Customs officials in the territory of another party
- Pooling of information
- Participation in investigation abroad
- Assistance related to surveillance
- Assistance in action against smuggling drugs
- Assistance in action against smuggling works of art


The inadequate rate of ratification in West Africa has been partially offset by the signing of the Members States of the Economic Community of West African States (ECOWAS) of the 1982 Cotonou Convention for Mutual Administrative Assistance in Customs Matters “relating to mutual assistance in customs matters for a better control over normal trade and more efficient control against smuggling”.

3.5 Convention on the Harmonized Commodity Description and Coding System (HS Convention) (1988)

Adopted in 1983, it came into force in 1988. The HS multipurpose goods nomenclature is used as the basis for customs tariffs and the compilation of international trade statistics. The HS is also used for many other purposes involving trade policy, rules of origin, monitoring of controlled goods, internal taxes, freight tariffs, transport statistics, quota control, price monitoring, compilation of national
accounts, and economic research and analysis.


3.6 ATA Convention and the Convention on Temporary Admission (Istanbul Convention (1993))

Both the ATA Convention and the Istanbul Convention are WCO instruments governing temporary admission of goods. The ATTA system, which is integral to both Conventions, allow the free movement of goods across frontiers and their temporary admission into a customs territory with relief from duties and taxes. The goods are covered by a single document known as the ATA carnet that is secured by an international guarantee system.


The ATA Carnet System is currently in force in the following African countries: Côte d’Ivoire, Madagascar, Mauritius, Morocco, Senegal, South Africa and Tunisia.

A system similar to the APTA Carnet System operates on the basis of bilateral agreements between South Africa, Lesotho, Namibia, Swaziland and Botswana under the Southern African Customs Union (SACU).


The Convention gives rules on the valuation of Goods for Customs purpose by which a customs officer determines the value of an imported good for the purpose of levying an ad valorem tariff according to the Brussels Definition of Value (BDV).

African countries which have signed the Convention were Algeria (1977), Kenya (1967), Rwanda (1964) Senegal (1978) and Tanzania (1977).

The convention was re-negotiated during the Tokyo Round Valuation Code or the Agreement on implementation of Article VII of the GATT 1994\(^1\) concluded in 1979 which laid down the general

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\(^1\) Article VII of the General Agreement on Tariffs and Trade laid down the general principles for an international system of valuation. It stipulated that the value for customs purposes of imported merchandise should be based on the actual value of the imported
principles for an international system of evaluation for Customs purpose\textsuperscript{14}. At that time its acceptance was voluntary.


Adherence to the Agreement became mandatory as part of membership in the WTO Agreement is administered by the WTO Committee on Customs Valuation. The Agreement also established a Technical Committee on Customs Valuation, which operates under the auspices of the World Customs Organization (WCO), with a view to ensuring, at the technical level, uniformity in interpretation and application of the Agreement.

3.8 Customs Convention on Containers (1972)

The 1972 Customs Convention on Container has two principal objectives.

First, it provides for temporary importation of containers, free of import duties and taxes and free of import prohibitions and restrictions, subject to re-exportation within three months from the date of importation; such temporary admission of containers shall be granted without the production of Customs documents.

Secondly, the Convention provides for approval of containers for transport under Customs seal. Containers approved by a Contracting Party as complying with the provisions of the Convention for the transport of goods under Customs seal shall be accepted by other Contracting Parties for any system of international carriage involving such sealing.

The following countries on the African continent have signed the Convention without reservation: Algeria (1978), Burundi (1998), Liberia (2005), Morocco (1990), Tunisia.

\textsuperscript{14} The determinations of the customs value for the application of duty rates to imported goods must be conducted in a neutral and uniform manner, precluding the use of arbitrary or fictitious values.
# Table of Contents

1. Smart Corridor Concept ................................................................. 2

2. Performance Monitoring System (PMS) ........................................... 2
   2.1 Concept ................................................................................... 2
      2.1.1 Objectives and functionalities .............................................. 2
      2.1.2 Components ..................................................................... 3

3. Smart Corridor components & benefits ....................................... 4
   3.1 Introduction to corridor technologies ........................................... 4
   3.2 Trade Community Data Hub and ICT network .............................. 4
      3.2.1 Description and functionalities ........................................... 4
      3.2.2 Challenges and benefits .................................................. 5
   3.3 Electronic Cargo Tracking System ............................................. 6
      3.3.1 Description and functionalities ........................................... 6
      3.3.2 Challenges and benefits .................................................. 7
   3.4 Regional Transit Bond Guaranty System ..................................... 7
      3.4.1 Description and functionalities ........................................... 7
   3.5 Interconnected in-motion axle weighbridges .................................. 9
      3.5.1 Challenges and benefits .................................................. 10
   3.6 Additional technical components ............................................. 10
   3.7 ITS solution selection and implementation ................................. 10

4. Recommendations to Establish Intelligent Transport Systems in Smart Corridors 11
   4.1 Corridor Options ................................................................. 11
   4.2 Corridor Selection ............................................................... 12
   4.3 Corridor Instruments ............................................................ 12
   4.4 Smart Corridor Component ................................................... 12
   4.5 ITS Modules ....................................................................... 13
1 Smart Corridor Concept

The Smart Corridor (SC) is defined by the African Union Commission (AUC) as a modal or multimodal surface transport route with quality infrastructure and logistic facilities, between two or more countries, used to carry intra-regional and international cargo. Typically, a Smart Corridor will include innovative Intelligent Transport Systems (ITS) aimed at facilitating trade through simplification of transport administrative processes and accelerating information exchange among the key corridor stakeholders.

A Smart Corridor will have new technologies, implemented in order to reduce transport time and cost across the African continent and more specifically for landlocked countries. These technologies are referred to under the general heading of Intelligent Transport Systems (ITS). ITS components include computerized network infrastructures, communication equipment, Electronic Data Interchange (EDI) and software.

The centerpiece of ITS within a Smart Corridor is the multi-countries Performance Monitoring System (PMS). Within corridor movement of goods there is a succession of administrative and operational steps involving a substantial number of participants. The PMS sources information from each of the Corridor stakeholders for each transported cargo. The database is able to track the cargo from the entry point to destination including the time taken for each stage. The aggregation of information enables the PMS to provide detailed statistics referred to as Key Performance Indicators (KPI). These figures can be used to highlight possible bottleneck and responsibilities for improving performance.

KPI’s provide key information for Corridor Management Institutions (CMIs). The PMS reporting system should provide reliable detailed information to enable CMI’s to evaluate Corridor efficiency and diagnose issues. The CMIs’ are responsible for proposing improvement strategies.

2 Performance Monitoring System (PMS)

2.1 Concept

2.1.1 Objectives and functionalities

The main objective of the Smart Corridor is to reduce the time needed for a consignment to be transported from entry to exit point. Since Operational and administrative processes can be highly time consuming the Smart Corridor needs to be able to identify, monitor and improve all these processes. Within the Corridor, processes need to be reorganized to improve efficiency and redundant processes need to be discarded, and those processes considered as bottlenecks have to be identified. Typically, bottlenecks occur where high levels of traffic exceed the capacity of timely handling. Resultant delays in the transport logistic chain therefore need to be addressed as a priority. The role of the CMI is to diagnose issues and the function of the PMS is to highlight delays and responsible parties.
The PMS requires comprehensive information on international transport data comprising volumes and timeframe for each step. The PMS database needs to have very disaggregate data on all steps and stakeholders in order to precisely reveal time and delay issues throughout the corridor.

The PMS gathers data linked to cargos transported between any two points. For a specific consignment reference, the PMS must store date and times of all the steps of each stakeholder sequentially. Data required includes: the dates and times of vessel arrival, unloading from vessels, declaration submission, release, port fees payment, loading, on truck/train, arrival at the first border, customs processes, etc. For each step of each cargo transported starting and ending date and time, one (or several) responsible contributors, and a step workflow (predecessors and successors) will be included in the database.

The PMS system enables CMI’s to aggregate data on all consignments. The combined data can be used to generate average delay data for each stage of the corridor.

The CMI must define objectives for the corridor. These objectives can be scaled using the KPI’s. They should be designed jointly with the stakeholders and the Government representatives. These Indicators must determine the minimum time and values required to be achieved by the Corridor under various conditions. The PMS should provide the corresponding statistics to compare to the KPI in order to evaluate the progress made over time.

From the PMS statistic, the CMI and the various stakeholders are able to analyse the sources of delays on the Corridor, and where time savings can be made. From these reports, the parties can establish strategies for improvements, which may include the modification of stakeholder procedures, equipment improvement and/or the deployment of additional ITS components. Some change requests can be dealt directly by corridor’ stakeholders.

Some improvements may require an institutional action, especially when law enforcement or new regulations are required. Wherever necessary, the CMI should inform the participating Governments. Ideally, the CMI should relate directly with the National Committees on Trade Facilitation as per the WCO Trade Facilitation Agreement dated 15/07/2015.1

CMI’s must also directly link to the Ministries of transport and Ministries of Finance of each country crossed by the corridor. Monthly CMI reports and recommendations should be submitted at high level to ensure support from the participating Governments.

2.1.2 Components

PMS’s should include a database, a data interchange; a statistics module to compute KPI’s and a reporting tool to present the key information to CMI’s.

1 WCO Trade Facilitation Agreement -https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm – Article 13-2
3 Smart Corridor components & benefits

3.1 Introduction to corridor technologies

Modern technologies can bring added value in order to improve transport conditions by assisting in reducing the processing times, in automatizing certain stages, in reducing paper documentation, using electronic data exchange, and providing real-time information to stakeholders.

Intelligent Systems are mainly software and hardware technologies implemented on the Corridor to rationalize, simplify and automate processes in order to save time. These systems include Information and Communication Technologies (ICT), that provide access to information through telecommunications, network infrastructure and communication tools used to interface stakeholders’ various operational systems.

Several ITS items have been defined specifically for the African environment. A review of Best Practices in existing African Smart Corridors has revealed four key technological components for a Smart Corridor:

1. Trade Community Data Hub;
2. Tracking System;
3. Transit Security Bond Guaranty; and
4. Interfaced Weighbridges.

The intelligent system to be implemented on the Corridor must be interconnected to the Performance Monitoring System (PMS) Database. Intelligent Systems are, among others tools, the vital source of data that feed the CMI information systems.

3.2 Trade Community Data Hub and ICT network

3.2.1 Description and functionalities

A Trade Community Data Hub (TCDH) is the central database related to the international trade operations of the Smart Corridor. The system assists the various stakeholders involved in the Corridor process as follows:

**Stakeholder’s Interconnection:** the TCDH is the centre of all the stakeholder’s operational databases across the corridor’ countries. It is based on EDI (Electronic Data Interchange) software. This interface software determines, when, how and what data to transfer from a stakeholder to the TCDH. The TCDH is responsible for the implementation and maintenance of the international network infrastructure and the communications in every country of the corridor.

**Task flow management:** the TCDH controls the workflow step by step. It requests each actor to perform their duties in due time. The system advises relevant actors the process they need to perform while monitoring their time performance.

**Paper reduction and data transfer:** the TCDH collects and distributes electronic documents (data) among relevant stakeholders. Mainly these documents are authorizations, documents of transport, declarations, invoices, payments and releases. The TCDH replaces paper documentation and stamped authorization needed in the processes, rendering it paperless and potentially faster.
TDCH is a technological equivalent of Single Windows Systems (SWS), Port Community Systems (PCS), and TradeNet. However, the Corridor Hub is used in a specific configuration different from these others as it includes stakeholders of two or more countries.

### 3.2.2 Challenges and benefits

<table>
<thead>
<tr>
<th>Issue</th>
<th>Challenge</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information exchanges acceleration</td>
<td>In non-Smart corridors operator’s representatives fill numerous forms, submit many requests for authorizations, declarations, obtain transport documents, get documents stamped and pay invoices, etc. Usually, the representative physically queues in each office and then moves on to the next step in another office. This is exacerbated in a corridor which involves processes in several countries. It implies for the economic operator a duplication of service providers or staff in each country.</td>
<td>Under a TDCH operators do not need to fill many forms as the data is transferred electronically from one stakeholder to another. There is no need to present documents for stamping as validation is electronic. There is no need to move physically to submit, collect or pay. All documents are sent and received electronically through a computer system and an internet connection. The TDCH accelerates the communication flow using digital communication.</td>
</tr>
<tr>
<td>Control over steps in the workflow</td>
<td>The documentation processing and authorisation by the various private or public administrations often take time and performance is often not measured.</td>
<td>The TDCH automates processes, and approved documents are automatically transmitted to the right stakeholder. The next stakeholder is then automatically informed of the following step to be performed. In case a process is taking an abnormal amount of time the responsible party is automatically identified and problem can be solved.</td>
</tr>
</tbody>
</table>
### Issue | Challenge | Benefit
--- | --- | ---
**Stakeholder intraregional network within the corridor’s area** | Corridor administrative and operational processes involve many countries. Each national administration is independent from the others. In a standard corridor process, there is no exchange of information between the various countries. For each country the operator must duplicate its effort with redundant organization each time a consignment crosses a border. | Under a TDCH regional network infrastructure, the exchange of data achieved within and between all the countries concerned by the transit. The Data Hub exchange database is shared by all the counties involved. |

**Data consistency / Security** | The trade community involved in the corridor process sometimes face documentation error or forged documents. In case of fraudulent document there is no simple way for the stakeholder to verify data unless writing to the relevant authority to get a validation. The time needed for a correction or a verification on a paper document can be a lengthy process. | Due to the electronic data exchange, the information can be checked in the database without any request to the counterpart. In case of enquiry is needed, the stakeholder can place a request within the TCDH. Both parties are in direct contact without any intermediary or paper. |

**Data source for CMI / PMS** | In a standard corridor there are often no sufficiently detailed statistics to enable the CMI to analyses the problems and to reach conclusions. Without appropriate statistical information, the stakeholders’ responsibilities may be unclear. | The TDCH is capable of collecting all the data required by the PMS. Data is used to analyse problems and develop solutions. It can be used to clarify responsibilities. TDCH is the main source of information that allows accurate corridor performance monitoring. |

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### 3.3 **Electronic Cargo Tracking System**

#### 3.3.1 Description and functionalities

Goods in transit are under the strict surveillance of the various customs authorities. These authorities have the responsibility to protect their populations against substandard or dangerous goods that may be imported and also must secure the any duties and taxes due.

A consignment crossing a country in transit is potentially a loss of revenue for the Customs Authority, where a good declared in transit never reach the border and consignments stay within the transit territory. The administration has to ensure that goods reach safely the targeted border. The resultant processes place a burden on the trade operator. Customs authorities can escort the consignments or to implement control check points on the corridor road at various stage until the border.

Automation and the modern technology now provide the potential for efficient solutions that secure revenue collection and facilitate trade through reduced human interventions.

The Electronic Cargo Tracking System ECTS uses software and hardware technology to provide a secure solution to satisfy the trade community and the authorities. In the ECTS software the user can determine a corridor route on an electronical map that corresponds to the physical route of the corridor.

Trucks / wagons caring consignments in transit are sealed with a Global Positioning System (GPS) device. This device can continually transmit the position of the truck using satellite information and deliver this information to the software using the wireless data network, usually the GPRS (Mobile phone network). This GPS/GPRS solution enable customs authorities, clearing agents, transport companies, importers and exporters to monitor the position, in real time, of trucks and cargoes in
transit along the Corridor on a screen display. Consignments and vehicle movements can be followed visually on an electronic map.

If seals are tampered with while in transit, ECTS activates an alarm that trigger the intervention of the relevant police or customs authority.

### 3.3.2 Challenges and benefits

<table>
<thead>
<tr>
<th>Issue</th>
<th>Challenge</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit process simplification and flexibility</td>
<td>Standard processes of transit for customs in some cases can be cumbersome.</td>
<td>ECTS is a tool that enables control of goods in transit without heavy logistics like customs escort / convoy between borders. ECTS offers a procedural simplification and gives additional transport management flexibility for the trade community.</td>
</tr>
<tr>
<td>Informal check points monitoring</td>
<td>One recurrent problem on the corridor are the informal check points which generate costs and delays.</td>
<td>ECTS enables collection of information related to the road check points (Informal, Customs and Police) on the transit route. The information about the road stops enables the CMI to generate statistics and address identified problems.</td>
</tr>
<tr>
<td>International / regional ECTS benefit</td>
<td>Different neighbouring countries have adopted different ECTS systems that are unable to communicate with each other</td>
<td>A regional ECTS project needs to include all the countries of the Corridor. The contract is signed by the CMI with the ECTS is for the overall region, and emphasis the need for a CMI.</td>
</tr>
</tbody>
</table>

### 3.4 Regional Transit Bond Guaranty System

#### 3.4.1 Description and functionalities

For transit, the standard guaranty process is almost universal in Africa at national levels. An economic operator using the bonded customs transit regime must post a bond, a financial guarantee, or surety with the responsible authority. The collateral can be cash, a bank guaranty or an insurance bond mechanism.

The financial guarantee insures Customs taxes/duties for cargoes declared in transit. In case the goods do not reach the declared country exit point, Customs can draw its dues from the bond, usually from the clearing agents’ bond account.

Typically, for a consignment in transit, the economic operator must post a bond in every country the consignment is crossing. In mobilizing the resources necessary to guarantee the amount of the potential duties and taxes to be paid in each country, and operators ties up his liquid assets.

For corridor management, this guaranty system is implemented at regional level involving Customs of each corridor countries. The surety is deposited by the operator’s representative only once. Each customs then has access to the surety and can draw taxes from the same and unique bond in case of

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issues. The system is under the control of each country crossed by the transiting consignment. The process is usually known as an International Transit Customs Security Bond.

The transit guaranty system exists almost everywhere in Africa at a national level. In some locations the guaranty exists at regional level. In some regions, although the international system was implemented, it is not working efficiently, for instance, where customs in each country concerned by the transit tend to lack trust in neighboring Customs administrations. Consequently, each Customs authority want to control the bank guaranty resulting in system duplication or triplication. Although the guaranty system is regional, the guaranties are consequently raised in every country of the transit negating the objective of the regional bond initiative.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Challenge</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplified process</td>
<td>Redundancy of the processes in each country, leading to delays.</td>
<td>A regional agreement on a regional guaranty system simplifies the processes as there is only one surety system for each country crossed. When implemented with transit tracking, trucks can cross borders with minimal human intervention, as the trucks are followed closely using the GPS systems.</td>
</tr>
<tr>
<td>Reduced costs</td>
<td>Economic operator must immobilize multiple sums of money for each customs administration along the corridor. Posting each bond incurs additional operational costs</td>
<td>The Transit Bond Security System reduces the surety mechanism to only one process with one financial guaranty. This systems saves the operator cost of capital and cost of service.</td>
</tr>
<tr>
<td>Delays for redundant physical verifications</td>
<td>Each Customs would like to verify the consignment in transit when crossing the entry and exit borders. For a consignment landing in a seaport and crossing 2 border posts, it could mean up to 4 physical verifications. Verifications are the longest administrative process for the overall transit process.</td>
<td>The guaranty system coupled with the tacking system ensures physical integrity of the goods and financial coverage. Customs can focus on risky consignment and leave the vast majority of consignments to cross borders without intervention. Others can be monitored relying on the modern ITS tools.</td>
</tr>
<tr>
<td>Inter-administration trust with regional system</td>
<td>In some case the regional guaranty system is not efficient. Some customs are requesting duplicated guarantees to insure themselves.</td>
<td>The regional guaranty system should be implemented by independent institution or a private company and not directly by national governments. Companies can be liable for the amount guaranteed with a secured system that can be activated by any of the various customs national administrations concerned.</td>
</tr>
</tbody>
</table>
3.5 **Interconnected in-motion axle weighbridges**

Road Authorities (RA) are important stakeholders along the whole Corridor. Apart from maintenance responsibilities they need to evaluate the weight of loaded vehicles. Road Authorities have two main responsibilities:

1) checking the trucks compliance to the weight regulation to ensure safety of the road users
2) protecting the infrastructure against premature degradation due to overweight vehicles.

Customs verify weights declared by the economic operator in order to check consistency with documentation.

Road Authorities can weigh at borders and at strategic locations within the road network. Customs usually weigh at the exit of the seaport, at the exit borders of each country, at the entry in the country and mainly at the depot responsible for the final release of the consignment.

The information needed by Customs is different from the information needed by Road Authorities. Road Authorities check gross vehicle weights and individual axle loads to compare these to maximum permissible weights. Customs needs the consignment weight which is obtained using the tare of the truck deducted from the gross weight. Therefore, the equipment for measurement can be different for each administration. In some cases, the weighting processes are recurrent and unnecessarily redundant.

In a Smart Corridor the objective is to limit the number of weighting processes along the route from the beginning to the end, whilst maintaining full checking capability. Whenever possible the information produced by one of the administrations should be shared with the other one in order to avoid redundancy and also between countries to the Some Road Authorities have taken measures to reduce the number of weighting stages for consignments in transit along the corridor, for example Kenya[^3] on the Northern Corridor.

The exchange of information between the various national and regional administrations should be performed electronically. The weighbridges should be connected via EDI to the TCDH. Each weight report should be transferred via the network to each relevant authority. Automatic weight reporting and delivery to stakeholders should be developed for existing weighbridges and incorporated into new equipment.

Modern measuring systems have axle dynamic weighing processes which enable trucks to be weighed while moving (Weigh-in-Motion). Vehicles loaded within legal limits can proceed without stopping, and overloaded trucks should be pulled over for static weighing. Hence Weigh-in-Motion (WIM) is used some few hundred metres in advance of a static weighbridge. Static weighing is necessary as WIM results are usually not accurate enough to withstand a legal challenge.

3.5.1 Challenges and benefits

<table>
<thead>
<tr>
<th>Issue</th>
<th>Challenge</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redundant process</td>
<td>Customs and road authorities weight trucks at many stages and road authorities tend weigh several consignments in transit that normally have no weight modification during the trip.</td>
<td>Putting in common tools to weigh consignments in transit and suppressing the redundant inland weighing can deliver time reductions.</td>
</tr>
<tr>
<td>Reducing journey times</td>
<td>Trucks usually queue at the scale in order for the vehicle to be weighed and then wait to receive the report.</td>
<td>With Weigh in Motion and the EDI for report generation queuing and report issuance waiting phases are removed.</td>
</tr>
</tbody>
</table>

3.6 Additional technical components

Other technologies that can be implemented over a Smart Corridor are:

**Customs transit pre-clearance before vessel arrival / Manifest:** Customs should enable in their Customs Management System (CMS) for the economic operator to declare goods before arrival and obtain pre-release.

**Risk management customs / green channels:** Customs should implement Risk Management to focus on high risk transactions and implement simple and fast processes for low risk consignment (green channel).

**X-ray scanner image data transfer:** X-ray images of a consignment that have been taken in the seaport can be transferred electronically to the Customs at destination for analysis.

**Automatic road toll payment systems:** Road tolling should incorporate electronic remote payment so that vehicles do not need to stop at the toll barrier.

**Advanced Cargo Information / Exporter declaration:** ACI allows exporters to declare goods that have been sent to a specific country some time before arrival.

**Electronic authorization application & delivery form government agencies:** The TCDH can develop web applications to interface with the various government agencies involved in the corridor process. Users can then apply for authorization through web-software, for formalities such as driver registration, import declaration, and agencies’ inspections.

**Traffic / maintenance / Safety status reports:** These systems collect information along the Corridor on traffic, accidents, maintenance, weather conditions and then deliver reports and alerts to stakeholders, which can assist them in transport scheduling and monitoring.

3.7 ITS solution selection and implementation

The ITS technologies described above can be designed and developed tailor made by the CMI. Such system development would cost between USD 10 and 20 million, and would take several years. However, there are existing commercial solutions that have been implemented in Africa or elsewhere in similar conditions. It is recommended to adopt such existing solutions rather than starting involving a CMI in a massive project development.
Research\textsuperscript{4} into IT project implementation suggests that almost 20\% of such projects fail, thus jeopardizing the existence of the entity managing the project and half fail to reach objectives in terms of budgets and deadlines.

Using a private sector supplier means that the project contract can be related to a performance indicator, and payment linked to these indicators and investment secured by the performance bond. This usually guaranty the maximum effort and flexibility of the providers to reach success.

The above systems should be self-financed. Numerous companies today are more in more involved in developing business models of concession and Private Public Partnerships. Providers are getting paid the investment of equipment and implementation by providing the operation and maintenance services to the users. Thus the interests of the company are the same as for the CMI or the end-user. Performance is essential for providers as this is the source of revenues to covers investments. Concession models usually guarantee a strong commitment to the success of the program. It is recommended to favour these existing partnership with the private sector compared to use government budgets for investment.

When several providers are working on a major project there is a high chance that the various participants end up in a conflicting situation, generating delays or even project failures. For important projects like Smart Corridor ITS component, the CMIs should first elaborate the expected output and performance and request the implementation of these specifications to a consortium. The CMI should select a group of companies united to work jointly and led by the primary bidder. In case of crises, the solutions would have to be found between the group of providers and not within the client CMI. It is considerably easier and more efficient for the CMI to manage a unique interlocutor, which is the consortium representative, than several entities.

4 Recommendations to Establish Intelligent Transport Systems in Smart Corridors

4.1 Corridor Options

The following corridors are being assessed as two potential Pilot Smart Corridors:

1) South corridor
2) Northern Corridor
3) Beira corridor
4) Central corridor
5) Addis-Ababa-Djibouti corridor
6) Maputo corridor
7) Dar es Salam corridor
8) Abidjan-Lagos (coastal corridor)
9) Dakar-Bamako-Niamey corridor

\textsuperscript{4} http://www.mckinsey.com/business-functions/business-technology/our-insights/delivering-large-scale-it-projects-on-time-on-budget-and-on-value
10) Douala-Ndjamena –Bangui corridor

4.2 Corridor Selection

In selecting the pilot corridors, the following are recommended to be in place:

a) Buy-in and commitment by the TCCs to implement a SC,
b) Safety and security for working in the transport corridor countries,
c) Demonstrable Transport Corridor Countries (TCCs) political will and commitment at the highest levels to implement WTO/RECs Trade Facilitation (TF) measure,
d) Demonstrable Transport Corridor Countries (TCCs) political will and commitment at the highest levels to address corridor infrastructural and safety issues, and
e) A champion institution such as a CMI, Joint Route Management Group/Commission identified to work with the consultant both in the design and implementation of the pilot smart corridors

4.3 Corridor Instruments

A single three-tier structure institution is recommended as follows:

a) **Regional level** - encompassing appropriate organs of both the AUC and the REC Secretariat including appropriate representation of both public and private sectors regional organisations and associations;

b) **Corridor level** - comprising of a Committee of Ministers responsible for corridors, an Executive Management Committee composed of appropriate level representatives of both the public and private sectors, and a permanent Secretariat made up of professional and technical staff.

c) **National level** - consisting of a National Committee constituted by various public and private sector stakeholders with interests in corridor issues

4.4 Smart Corridor Component

Four key components should be implemented to constitute a Smart Corridor as follows:

a) Cross-border Intelligent Transport Systems (ITS)
b) World Trade Organization/World Customs Organization (WTO/WCO) Trade Facilitation (TF) Tools such as electronic National Single Windows, Coordinated Border Management, etc.
c) RECs’ agreed TF policies, laws, regulations, procedures, safety measures such as One Stop Border Posts, Vehicle Overload Control Systems, Electronic Certificate of Rules of Origin, etc.
d) Quality Transport Infrastructure and Maintenance such as agreed road technical norms and standards, bypass for key cities and villages, climbing lanes, good rail and port capacities as well as PPP for both infrastructure provision and maintenance.
4.5 ITS Modules

A Smart Corridor ITS component should have the following modules:

- Trade Community Data Hub (EDI)
- Cargo/Transit Tracking System
- Regional Transit Security Bond Guarantee
- Customs Risk Management System
- Weighbridge interface and X-ray scanner
## Module 7: Private Sector Involvement

For Developing & Financing Transport Infrastructure Projects and Services

By Ted Sheldia

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction: PPP Concept and Public Policy Objectives</td>
<td>3</td>
</tr>
<tr>
<td>2. A PPP Enabling Environment for Private Sector Participation in Development, Financing and Operation of Transport Infrastructure and Services</td>
<td>5</td>
</tr>
<tr>
<td>2.1 Developing the Required Policy, Legal and Institutional Framework for Promoting the PPP Approach</td>
<td>5</td>
</tr>
<tr>
<td>2.1.1 Policy Framework</td>
<td>5</td>
</tr>
<tr>
<td>2.1.2 Legal framework</td>
<td>6</td>
</tr>
<tr>
<td>2.1.3 Institutional Framework</td>
<td>7</td>
</tr>
<tr>
<td>2.2 PPP Conception and Development</td>
<td>10</td>
</tr>
<tr>
<td>2.2.1 Assure that effective regulatory instruments are in place</td>
<td>10</td>
</tr>
<tr>
<td>2.2.2 Assess the capability and capacity of the public sector to implement PPPs</td>
<td>11</td>
</tr>
<tr>
<td>2.2.3 Assess the likelihood of success of a proposed PPP project</td>
<td>12</td>
</tr>
<tr>
<td>2.2.4 Demonstrate that PPP is the best project delivery method</td>
<td>12</td>
</tr>
<tr>
<td>2.2.5 Market Sounding</td>
<td>13</td>
</tr>
<tr>
<td>3. PPP Structuring, Financing, Procurement and Contracting Instruments</td>
<td>14</td>
</tr>
<tr>
<td>3.1 Selection of the most suitable PPP model for the proposed project</td>
<td>15</td>
</tr>
<tr>
<td>3.1.1 Step 1: Needs Assessment</td>
<td>15</td>
</tr>
<tr>
<td>3.1.2 Step 2: Risks Allocation</td>
<td>15</td>
</tr>
<tr>
<td>3.1.3 Step 3: Definition of the roles and responsibilities of each party</td>
<td>18</td>
</tr>
<tr>
<td>3.1.4 Step 4: Project Budgeting</td>
<td>19</td>
</tr>
<tr>
<td>3.2 Exploring the spectrum of financing options including innovative financing mechanisms</td>
<td>20</td>
</tr>
<tr>
<td>3.3 Designing fair and balanced PPP Agreements</td>
<td>24</td>
</tr>
<tr>
<td>3.3.1 Coping with deficiencies of the regulatory framework</td>
<td>24</td>
</tr>
<tr>
<td>3.3.2 Duration of the Agreement</td>
<td>24</td>
</tr>
<tr>
<td>3.3.3 Ensuring adequate risk allocation between partners</td>
<td>25</td>
</tr>
</tbody>
</table>
1 Introduction: PPP Concept and Public Policy Objectives

Conventional Public Procurement Approach

Traditionally, governments in most countries have relied on public procurement to develop the transport infrastructure networks. Within this approach, the designated government agencies are vested with responsibility for elaborating master plans, prioritizing needs and then arrange for public financing and development of individual projects. This is done by means of public procurement contracts where government agencies can utilize the services of the private sector for design and construction, with the award of individual contracts made on a competitive basis. However, private sector role usually does not extend beyond the provision of design services or works contracts. Once the project is completed, it is then operated and maintained by the government agency.

Public-Private Partnership Concept

A simple way to describe the PPP Concept is by responding to three main questions: “What, Why and How?”

What is a PPP?

There is no unique contractual model, nor a common legal definition recognised at the international level. However, a generally accepted institutional definition is as follows:

“A PPP is a partnership between the public sector and the private sector for the purpose of delivering an investment project and/or a service traditionally provided by the public sector.”

Why a PPP?

Given the limited capacity of both national governments and international development partners to finance the vast transport infrastructure needs of the African continent, alternative financing options for boosting up transport infrastructure development are being increasingly considered.

Private sector involvement for development, financing and operation of major transportation projects is a possible option that can produce mutual benefits for both public and private sector partners. Whilst traditionally the provision of major transport infrastructure facilities and related transport services to the user communities has been a prerogative of the public sector agencies, PPPs can effectively become a good alternative to it.

As the private sector increases its participation, it assumes increasing responsibility for the functions of design, build, finance, and operation and maintenance and of the infrastructure. In cases of full privatisation, the private sector also assumes complete ownership over the infrastructure assets.

The general drivers of interests in PPPs can be summarized as follows:

- Using private sector financing to make infrastructure investments that the public sector cannot afford;
• Maximizing the value for money (VfM)\(^1\) through appropriate risk allocation between the public and private sectors;
• Attaining greater efficiency, lower costs, higher quality and faster delivery of public infrastructure projects;
• Promoting innovation not only on technical and operational matters but also in financial and commercial arrangements.

**How to set-up a PPP?**

There are a range of PPP models that can be taken into account in assessing possible PPP options that can be applied to a transportation project. These include both complex and simple schemes whose features need to be analysed in detail together with advantages and disadvantages of each scheme. The suitability of each scheme to real case situations is to be assessed according to its complexity and feasibility, whilst keeping in mind that complex PPP schemes have not always proved to be the most suitable option. This is especially the case in countries where the regulatory framework for PPP’s has not yet matured. In such cases, a gradual approach in the scale of complexity of PPP schemes can be adopted in tandem with the consolidation of the PPP frameworks, concession laws and practices in the countries concerned.

Numerous forms of PPPs have been developed worldwide to respond to the various fields of application. The major categories of PPPs are presented in a simplified way in the figure below, in which the extent of private sector participation increases from left to right:

![PPP OPTIONS Diagram](source: Toolkit for Public-Private Partnerships in Roads & Highways: The World Bank March 2009)

The principal characteristics of each contract type are detailed in Annex 1.

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\(^1\) The concept of value for money (or VfM) is defined as the optimum combination of whole life costs and quality to meet the user’s requirements. It can be assessed using the criteria of economy (reducing the cost of resources used for an activity with a regard for maintaining quality), efficiency (increasing output for a given input or minimizing input for a given output with a regard for maintaining quality), effectiveness (successfully achieving the intended outcomes from an activity)
the partners to transform as some responsibilities of the public sector are transferred to the private sector. In the partnership, the public sector is usually represented by the roads agency whilst the private sector may be represented by enterprise(s) or consortium of firms, road operators, consultants, entrepreneurs, and/or financial entities.

- **A common objective**: the provision to road users of facilities and services that meet clearly defined physical and performance standards, encompassing interventions that range from the construction and operation of a new road to the simpler maintenance of an existing infrastructure. Each partner must bring his resources (money, property, authority, reputation), insofar as they bring value to the partnership.

- **A sustained collaborative effort**: the basis of the third “P” of the PPP, entailing a joint alliance between the public and private sectors beyond the traditional contractual relationship, that brings the best of each partner’s competences to optimize the achievement of the common objective. Given the medium or long-term nature of that objective and the transformation generated by the shift in roles, the partnership needs to be sustained over a long period of time. The longer the nature of the objective, the larger are the uncertainties associated with the project and the more critical and relevant the third “P” of a PPP becomes.

- **Recognition of individual interests of each partner**: generally, these entail a return on the investment for the private partner, and a net benefit to the society and the economy as a whole for the public entity (through the achievement of specific transport-related goals, such as the improvement of accessibility or the reduction of transport costs). These interests are channeled through the definition of risks. Thus, a clear assignment of risks is a precondition of the implementation of a PPP initiative.


2 **A PPP Enabling Environment for Private Sector Participation in Development, Financing and Operation of Transport Infrastructure and Services**

Worldwide experience has demonstrated that the successful implementation of a PPP program requires an enabling environment to be in place in order that PPP projects may be implemented effectively and bring the highest benefits to the public sector.

This PPP enabling environment thus requires political will and public sector commitment, a favourable investor climate which encourages private funding, a well-defined legal and regulatory framework, and capable public and private sectors.

Success in PPP projects generally results from a well-managed interaction between the public and the private sectors at all stages of project development and implementation, including most importantly a reasonable allocation of the risks inherent to infrastructure projects.

2.1 **Developing the Required Policy, Legal and Institutional Framework for Promoting the PPP Approach**

2.1.1 **Policy Framework**

Under PPP procurement, the public sector role changes from that of provider to that of a facilitator. A
The core element of any national PPP strategy is the development of a PPP Policy framework. A Policy Statement for Government shall give clarity to the public and private sector on Government objectives in starting a PPP program.

The policy framework provides a set of rules that gives confidence to both the public sector which has to implement the rules and also the private sector which has to invest time and money and aims to ensure that both will achieve their objectives.

A Policy framework can complement existing law and regulations and provide a justification for specific decisions. For example, these decisions can identify the sectors in which PPP will be initially considered or if unsolicited proposals will be contemplated. Some of these decisions can also be expressed as regulations, which are easier to modify than a law.

Some sectors such as railways are unlikely to attract private sector investment in the absence of reform and clarity regarding sector regulation. Even in the highway sector, a project’s revenue from tolls can be significantly impacted if parallel and non-toll based roads are simultaneously allowed.

A lack of clarity, consistency (frequent changes in policy) or fairness (such as policies seen as favoring one company over another) will increase the perceived risks of investing in the project. This usually results in more commercial risks being transferred to Government or even a smaller number of bidders, thus reducing the value of the PPP option.

To conclude, a stable and strong sector policy framework can only contribute to the attraction of lower-cost finance.

<table>
<thead>
<tr>
<th>Specific PPP framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>The legal and regulatory framework,</td>
</tr>
<tr>
<td>Procurement guidelines,</td>
</tr>
<tr>
<td>Model PPP contracts,</td>
</tr>
<tr>
<td>Risk Management Framework,</td>
</tr>
<tr>
<td>Financial guidelines (Tariffs, payments and Government support),</td>
</tr>
<tr>
<td>The Project Cycle and the role of Advisors,</td>
</tr>
<tr>
<td>Technical design and service standards,</td>
</tr>
<tr>
<td>Institutional and Approvals Framework (Including Dispute resolution mechanisms).</td>
</tr>
</tbody>
</table>

Source: Source Toolkit for Public –Private Partnership in Road & highways

2.1.2 Legal framework

A legal framework should create a favorable environment to attract private sector financing and put in place adequate controls to ensure that a PPP project will deliver its expected value to the public.

A PPP enabling legislative and regulatory framework such as a PPP/Concession law should clearly set up the institutional bodies and their responsibilities regarding the PPPs. Unclear and complex requirements and processes will raise concern from potential bidders.
The role of the legal framework is to put in place laws, decrees and regulation to guarantee that a PPP project will deliver its expected value to the public. Although no single model of legal framework exists, it is important to ensure clarity, responsibility and a degree of flexibility in allowing PPP Projects. A general PPP law is often sufficient, defining the general principles and responsibilities of all parties with decrees to detail specific requirements and more precise set of regulations.

According to the UN Legislative Guidelines on Privately Financed Infrastructure Projects a good PPP law should incorporate the following

- The law should provide the scope of authority to award PPP projects (identification of authorities, eligible sectors and geographical subdivision of regional PPP projects);
- The law should describe an institutional framework that enables sound administrative coordination;
- No unnecessary limitations should be placed on the allocation of risks;
- The law should clearly state the provisions for providing financial or economic support to the project;
- The law should provide transparent, competitive procedures for selection of bidders, requesting proposals up to negotiation and contract award;
- The law should describe exceptional circumstances for exemption of competitive procedures;
- The law should address how to deal with unsolicited proposals;
- The law should enable the private party to collect tariffs or user fees, subject to regulation; and
- Standard agreements and other guidance materials should be available.

Source: www.uncitral.org

2.1.3 Institutional Framework

PPPs require major institutional changes not only because the function of the public sector changes from direct provider of transport services to monitoring of service delivery by the private sector, but also the development of major transport projects which are catalysts to the regional economic development, require the public sector to act as promoter of the PPP projects.

A strong institutional setup is essential to manage and assess risks from PPPs and to help governments build a reputation of being a good partner. The lower political and regulatory risk perceived by the private sector, the higher the value for money that can be achieved.

Building PPP knowledge and management capacity is particularly important for most of the African countries where the infrastructure investment market is still considered risky due in part to incomplete legislative and regulatory framework in addition to insufficient institutional capacity in project development, structuring and implementation. The establishment of a strong institutional setup requires clear allocation and implementation of responsibilities and skilled and dedicated staff.

Two principal models exist: A decentralized approach that places responsibility at line ministries and a centralized approach by creating a dedicated a central PPP unit within the Ministry of Finance or Ministry of Planning or a national PPP/concession agency. Even in cases where a decentralized approach is chosen, creation of a centralized PPP unit, with a reduced role, is beneficial for providing a forum for acquisition, development and sharing of knowledge and expertise with other government agencies.
In both cases, there is a need to recruit high caliber specialists and create a nucleus able to drive the PPP process. At the beginning the PPP units would primary focus on developing institutional capability, stimulating the required legal and regulatory changes, promoting market interest and developing pilot projects in order to test and demonstrate the value of PPPs. As experience is gained the role of such units changes to focus on assisting in the identification and selection of PPP opportunities, counseling the line ministries, developing the required analysis tools to ensure value for money, private sector investors’ attraction and, above all, maintaining political support for PPPs.

### Tasks of a PPP Central Unit

Typical tasks of a PPP Central Unit include among others:

- Gather initial information on the effectiveness of PPP policies, regulations, procedures and practices;
- Assess the current and potential PPP opportunities and related benefits and drawbacks;
- Assess the existing Legal and Regulatory Framework and Propose New or Modify Existing Laws and Decrees to Enhance PPP Implementation;
- Define the country policies, regulations and procedures to implement the PPP projects;
- Prioritize the infrastructure projects to be included into a PPP Program for Government support;
- Provide coordination between the ministries of finance, planning ministries, and line ministries concerned on PPP matters;
- Carry out evaluation of PPP projects to ensure that they are economically viable and socially acceptable.
- Assist with drafting future legislation for PPPs and developing Minimum Standards and Regulations Governing Contracts;

In addition, if a decentralized approach has been taken, the PPP central unit should advise the line ministries (e.g. Ministry of Transport) in establishing a PPP cell to support the line Ministry as the Contracting authority of the PPP Project. At least, four types of key skills need to be recruited for a small PPP cell: road engineering, economist specialized in feasibility studies, PPP/financial analyst and a lawyer with legal experience in concessions.

Specific tasks of the PPP Central Unit shall be to:

- Help strengthen the legal capacity of various levels of the line Ministry to enter into PPP arrangements with the private sector;
- Prepare Operating Procedures and Guidelines for PPP Cell operations
- Assist in preparing Information Memoranda and pre- and/or full Feasibility Studies;
- Advise on Prequalification, Tender Documents, RFPs and on the Evaluation of Bids to ensure compliance with national laws and international best practice;
- Review Draft Negotiated Contracts;
- Provide assistance in negotiations, and implementation of the PPP infrastructure projects.

At a later stage, during PPP implementation, the PPP units could perform a centralized oversight function and serve the role of a single contact point for various public sector agencies and the private sector.

Such units and the public sector in general, have a key role to play in creating trust, which in turn allows a reduction in risk and eventually the overall cost of a project, and most importantly further the development of effective and sustainable partnerships. Trust must include the open exchange of information with the private sector, respect for the objectives of all parties involved in the PPP and
integration of mechanisms for non-conflicting dispute resolution.

Trust also implies a strong level of political commitment which must be developed, sustained and communicated by the necessary institutional structures. As risks and challenges increase, so must the governments’ support and commitment. Achieving a fruitful partnership requires strong political support and long term commitment that goes beyond a specific government. This requires also institutional structures able and willing to effectively negotiate with the private sector and where necessary to renegotiate contracts to enhance benefits fairly for all parties.

To this end, experience has shown the value in identifying ‘political champion’ for PPP promotion in a country, able to provide an effective link between political priorities and institutional structures. Political support should be realistic and practical about what PPP can achieve and how it is to be implemented. A particular role that the “political champion” could play is to defend the PPP approach for projects that present greater long-term national interests as opposed to short-term political gain.

Aware that the institutional and organizational framework of the transport sector in many African countries may not be fully mature for development of PPP arrangements, the role of centralized PPP units is of particular importance in early stages. This issue is particularly critical for transport subsectors dominated by only one operator or where there exists only one, usually a public operator, as it is often the case with the rail or airport operators.

The willingness to involve the private sector in further development and operation of such transport facilities could give an impetus to the sectoral reforms under way in many African countries.

In all cases, particular attention must be paid to the procurement procedures and practices as to the ability to guarantee open and fair competition\(^2\). This is critical to attract the interest of the greatest number of the private sector investors possible. Development of specific PPP laws or updating of existing concession laws should be encouraged in order to accelerate the PPP procurement processes given certain restriction that the traditional public procurement laws pose.

A key issue that may affect the success of a PPP during the implementation phase is the extent and effectiveness of the public sector monitoring systems and capacity in ensuring compliance with PPP contract conditions\(^3\). Special consideration should be given to building such a capacity in the public sector transport implementing agencies at an early stage and during the PPP structuring process in order to ensure that they are prepared to properly handle the PPP contract management and performance monitoring during the implementation stage.

Last but not the least, along with the development of an effective public sector management and monitoring capability, it is necessary to promote the development of transport users associations to play a role as “watchdog” to ensure users’ satisfaction with the delivery of the transport services by the private sector.

Regular community and/or public consultation should be organized as early as possible in the project cycle so that views of affected groups can be taken into account and should continue not only during

\(^2\) Procurement issues are dealt with in the third chapter of this module

\(^3\) PPP Contract management and monitoring aspects are dealt with in the fourth chapter of this module.
the PPP development and procurement process but throughout its implementation. This not only creates a link between user communities with the private sector operator but also develops a strong sense of users and public ownership and participation in PPP projects.

For high impact projects, public consultation could take place at least three times with increasing levels of details: (i) initially during project selection; (ii) during the early stages of field work; and (iii) once the draft feasibility study reports are available. The public consultation process and results need to be described in the project feasibility study reports.

Public consultation should be distinguished from information provision and should be undertaken within the following framework:

- An exchange of information whereby inputs are requested from the public and concerns are addressed;
- Responsive feedback and accountability by Government;
- Options and risks are discussed openly;
- Use of meetings, workshops, consultative groups, NGOs, private sector representatives

### 2.2 PPP Conception and Development

Once the policy and institutional conditions for launching PPP projects are satisfied and there is a workable legislative framework in place, key actions required at the PPP preparatory stage include the following:

#### 2.2.1 Assure that effective regulatory instruments are in place

PPP’s are governed by a wide range of country regulations that must be put in place when developing a PPP in order to ensure the long-term legality and viability of the project. To begin with, a legal due diligence must be carried out on the national and sectoral regulatory framework intended to identify:

- the need for changes in the national legislation or transport sector specific regulations aimed at making private sector participation possible and effective including the development of institutional structures to oversee and regulate private operators
- elements that could impede private sector participation, affect viability or diminish benefits to be gained
- areas for possible restructuring of current transport operators’ regulatory frameworks ahead of PPPs with respect to their legal status, mandate and articles of association
- the impact that certain regulations may have on PPP projects and to define safeguards against regulatory risk that need to be included in the PPP contracts

The table below gives an indicative list of issues to be investigated during the negotiation of a PPP project.

<table>
<thead>
<tr>
<th>Legal and regulatory risk elements</th>
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</thead>
<tbody>
<tr>
<td>• Legal requirement of the State to provide transport</td>
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<tr>
<td>• Public procurement law and adequacy of</td>
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</tbody>
</table>
2.2.2 **Assess the capability and capacity of the public sector to implement PPPs**

The suitability of a PPP approach for major transport infrastructure projects should firstly be assessed against the capability and capacity of the public sector agencies to design and implement PPPs. Some elements to be taken into account during this capacity assessment include:

- Developing the necessary expertise to plan, design, tender, evaluate, implement and monitor a PPP project. Either such expertise can be developed in-house or funding must be made available to secure it from the market.
- Developing a sector policy (e.g. road, rail, air or waterborne transport) for PPPs in provision of current and future transport services and introduce a coherent planning process including early identification of PPP opportunities in the sector.
- Consider integration of priority funding strategies of international developing partners and IFIs into sectoral planning documents and PPP projects.
- Clear definition of authority and responsibilities within the government bodies regarding timelines for internal processes, authorization and the ultimate decision-making for a PPP project. For example, it is often the case that authorization by the Ministry of Finance is required before contracting a loan or issuing project bonds to raise additional finance for the project.
- Establishing efficient structures and procedures within the designated public sector agencies to enable an effective appraisal and procurement process of PPP projects as well as an adequate monitoring of service delivery by the private operators.

It must be remembered that international development partners and International Finance Institutions (IFI’s) can play a valuable role in the process of capacity development and institutional strengthening of government agencies designated to develop and implement PPPs. Of particular benefit would be the know-how and experience that IFI’s possess in designing PPP projects in developing countries which would help to adequately address the environmental and social challenges of Africa as well as
fully integrate the need for deriving real benefits for the user communities and the public at large.

### 2.2.3 Assess the likelihood of success of a proposed PPP project

The objective of the PPP conception phase is to decide on whether a PPP approach is suitable for a particular project. The main question to ask is whether the private sector would be interested in the proposed PPP opportunity.

The private sector will normally give priority to transport projects that can demonstrate:

- **Sufficient travel demand** - various market factors will need to be analyzed including existing and future demand projections, current and forecast traffic data, potential for traffic generation or diversion, transport facilitation mechanisms, etc.
- **Revenue generation and development potential** – This would require a preliminary analysis of transport costs for the existing or alternative routes, the tariff applicable (e.g. tolls) on the future transport project, the tariff levels for use of various facilities or services, possible revenue from ancillary services, etc.
- **Project financial viability** - various techniques can be used to determine financial viability but at this stage even a simple cash flow analysis may be sufficient to determine whether private interest is likely.
- **Strong political commitment** – Political risk is associated with PPP projects given their long-term nature, where new governments may have to oversee projects initiated by previous administrations. This risk will be assessed by the private sector in terms of consistency of the country’s government policy and regulations affecting the PPPs.

At this stage of PPP development, the public sector has a major role to play. Particularly, this includes undertaking of preliminary studies, such as technical and financial pre-feasibility studies in order to collect all available data and provide basic information to the potential private sector developers on possible investment scenarios, costs and potential revenue of the proposed transport project.

It is critical that the public sector assumes an active role in the development stage of major transport projects, which enhances the value of the PPP and the benefits that can be derived from it. To this end, the international development partners can often provide technical assistance support for development of the said studies.

### 2.2.4 Demonstrate that PPP is the best project delivery method

Both the suitability and possibility of procuring a transport project through a PPP approach needs to be demonstrated. This would raise both the profile of the project and the standing of the public sector agency, acting as a project promoter, and eventually attract a higher level of interest from the private sector that would see the public agency as a reliable project partner. Experience shows that a PPP project has far more chances of success in such cases where the public sector assumes an active role in promoting the project rather than awaiting for the private sector to come forward with its proposals.

There is a need for greater emphasis on value for money (VfM). In theory, the public sector rule for prioritizing PPPs should be VfM: if a project can be procured and implemented more efficiently under
a PPP than under traditional public investment, then it should be taken forward.

The value for money (VfM) assessment needs to demonstrate the added value of having the transport facility developed and operated with involvement of the private sector rather than by the public sector entirely on its own. The factors determining value for money would vary from project to project. A number of common elements to consider in all PPP projects include:

- Faster implementation - consider timelines for completion of the project including design and construction period to testing and putting in operation
- Reduced lifecycle costs - consider spreading both investment and operation and maintenance costs over the whole lifecycle of the asset;
- Better allocation of risk - consider, for instance, optimization of all risks associated with design and construction, if the facility will then have to be operated by the same party that was responsible for building it. Same considerations apply to minimizing the maintenance and rehabilitation costs as these will be typically borne by the same party that built and operates the facility
- Careful assessment of the services to be provided - consider the service levels at a given cost that can be achieved using the operation efficiencies offered by the private sector
- Generation of additional revenue - consider all the revenue streams that can be generated by the PPP project by putting in use previously unexploited public assets or leasing and renting ancillary services.

All benefits and costs should be systematically analyzed considering both quantifiable and non-quantifiable elements as well as the true cost for provision of the transport service by the public sector alone (whereby adding to the equation existing possible government subsidies).

A key tool in assessing the VfM of projects is the “Public Sector Comparator” (PSC)\(^4\). It compares the cost of the PPP option with the risk-adjusted cost of delivering the same service by the public sector. Risk is at the heart of all PPP projects. PPP projects are all about the treatment of risk and uncertain costs, hence the importance of the identification, allocation and mitigation of risks within the PPP projects.

The approach helps set up the financial contribution required by the public sector, setting out the level of user charges and to select the project design with the highest VfM.

2.2.5 Market Sounding

In each PPP project, the public sector is “selling” an investment opportunity to the private sector, therefore it must assess the market. Effective market sounding will improve marketability of the partnership opportunity and may significantly reduce procurement time, by bringing private sector perspective to the design of the PPP scheme at an early stage.

Market sounding focuses on the private sector as a whole, rather than on any individual

\(^4\) A Public Sector Comparator (PSC) is used by a government to make decisions about VfM in PPP Projects. PSC provides a benchmark for estimating value of money between hypothetical public procurement and alternative bids (proposal in response to a request formulated by a public authority for the purpose of carrying out an infrastructure project).
company. It includes no element of evaluation, and there is no commitment of any kind involved.

Market sounding offers a chance to shape the PPP scheme at a very early stage, when this is relatively easy to do. When the PPP scheme is already published in formal documents there will be little opportunity to change.

Market sounding involves gathering knowledge which is focused in these key areas:

(i) **Viability**: whether the proposed PPP scheme is actually viable, or has it ever been done;
(ii) **Capability**: will the private sector (individual or in consortium) be able to achieve the requirement;
(iii) **Capacity**: whether the market have the capacity to achieve what is required quickly enough and with large enough scale.

### MAIN BENEFITS OBTAINED FROM MARKET SOUNDING

<table>
<thead>
<tr>
<th>For the contracting agency</th>
<th>For the private sector</th>
</tr>
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<tbody>
<tr>
<td>• Establishing that there is in fact a market for the requirements, alternatively an early understanding of the requirement may help establish the market</td>
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<tr>
<td>• Confirming, through market reaction, that the scope and objective of PPP scheme are sound and achievable</td>
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<tr>
<td>• Finding out about new, innovative or alternative solutions</td>
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<tr>
<td>• Identifying potential issues or problems with the project</td>
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<tr>
<td>• Gaining first-hand knowledge of what private sector can and cannot do</td>
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<tr>
<td>• Establishing that the business scheme is packaged in such a way that the market is encouraged to respond, and that real competition is stimulated</td>
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<tr>
<td>• Laying useful foundation for contract and relationship management</td>
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<tr>
<td>• Managing stakeholders expectation of what will be achieved by the PPP project.</td>
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<tr>
<td>• The chance to assess whether the opportunity will be suitable</td>
<td></td>
</tr>
<tr>
<td>• The chance to raise issues and queries about the opportunity, and about the procurement process</td>
<td></td>
</tr>
<tr>
<td>• The chance to gain valuable insight into public sector working practices, requirement and priorities</td>
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</table>

Source: Toolkit for Public –Private Partnership in Road & highways

### 3 PPP Structuring, Financing, Procurement and Contracting Instruments

Launching a PPP Program requires public authorities to adopt a new role and thus acquire specific expertise at several levels for both project development and contract management. These skills will need to cover among key areas, planning, design, financing, procurement and contracting instruments.

Experience has shown that early development of conducive and consistent national legislative and regulatory structures greatly facilitates the identification, development and implementation of PPPs. A PPP scheme for a specific project can then be developed based on known models. There are several PPP models, each presenting a number of advantages and disadvantages. It is however important that
the selection of an appropriate PPP model be undertaken at an early stage to facilitate effective project design and achieve early buy-in of the parties. An early involvement of the potential private sector partners in shaping a PPP project is also required. (Annex 2 offers a review of the main characteristics of most commonly used PPP models)

### Module 7 Private Sector Involvement

#### Chapter 3 Selection of the most suitable PPP model for the proposed project

The following section offers a step-by-step approach on selecting the most appropriate PPP model for a given project.

#### 3.1.1 Step 1: Needs Assessment

The primary focus of the needs assessment is to clearly define and understand the objectives set by the public sector, its motivation and perception of the need for a PPP for a particular project. It is critical that the public sector decision makers make a careful assessment and prioritization of the needs. The assessment would involve consideration of the transport service needs, such as freight volumes, passengers, quality, etc., on the basis of the current service provision and that targeted to be achieved in the future. It is important that the main objective is clearly stated by the public sector agency, acting as promoter of the PPP project, in order to provide a clear vision to the private sector during the future phases of project preparation, procurement and implementation.

#### 3.1.2 Step 2: Risks Allocation

Allocation of risks associated to the design and construction, financing, operation and maintenance of infrastructure or the service delivery is often a central question in defining the most suitable PPP model for a given project. It is natural for the public sector agency to attempt to reduce risks on its side and transfer as much as possible to the private sector. Aware that risks are inherent in all projects, the public sector should however be guided by the principle that risks should be allocated to the party best able to manage it in the most cost effective manner. This necessitates the public sector to be ready to assume a number of risks in order to increase the viability and the value of a PPP model for the benefit of both partners. Generally, the more risk transferred to the private sector partner, the more financial reward the private sector partner will demand.

The table below provides the likely allocation of main risks between partners intended to achieve a balanced PPP project. It must however be noted that the actual risk allocation would finally depend on the PPP model chosen to apply on each project and the negotiation process.

<table>
<thead>
<tr>
<th>Risk Allocation</th>
<th>Private Sector</th>
<th>Public Sector</th>
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<tbody>
<tr>
<td><strong>Revenue Risk</strong></td>
<td>X</td>
<td>x</td>
</tr>
</tbody>
</table>

Revenue risk is the most critical of all unknown factors involved in PPP transport projects. Revenues flows are generally determined by two factors: utilization levels and tariffs. The availability of reliable historic information documenting demand and price elasticity levels varies among different sectors. In the rail sector, for instance, a great deal of information is likely to be available. However, the rail tariffs may well have been subsidized in the past, making it more difficult to determine how

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15
users would behave in the face of unsubsidized pricing. In the case of road projects, even with extensive investigation of past traffic trends, forecasts of future growth potential, and surveys of road users’ willingness to pay tolls, there is always a significant residual risk on the traffic levels that projects will actually attract. This risk is only reduced after a number of years of operation. In order to arrange project financing, certain assumptions regarding usage and revenue levels must be made. While these calculations are usually intended to be conservative, overstatements are not uncommon. Moreover, unforeseen future events can also have dramatic impacts, such as the oil prices. Assumptions regarding economic growth are especially important in Africa as these considerably impact on the trade traffic projections. Likewise, in countries, where automobile ownership and income levels are lower, motorists often opt to drive on slower parallel routes rather than paying expensive tolls. For road projects, the adequate level of traffic risk to be transferred to the private sector should be carefully analysed. Shadow toll or available payment mechanisms may have to be considered in an initial period of a PPP project instead of real tolling, which usually does not yield enough revenue to cover a significant percentage of investment costs.

<table>
<thead>
<tr>
<th>Design and Construction Risk</th>
<th>X</th>
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<tbody>
<tr>
<td>The construction cost of any project is one of the fundamental elements upon which financing is based and where cost or time overruns may be incurred. Poor project definition and design specifications, unknown geological conditions, or loosely defined safety standards can have dramatic effects on construction costs. Construction delays also have detrimental effects on capital investment costs. While some delays can be minimized through careful construction management, they still have the potential to arise and severely jeopardize the financial feasibility of a project. Construction risk is nearly always assigned to the private party, which has strong incentives for on-time completion of works. It is preferable to associate the design risk with the construction risk and allocate both these to the private sector; otherwise the public agency may be unnecessarily incurring excessive risks.</td>
<td></td>
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<tr>
<td>The private sector is well experienced to manage these risks through completion of careful engineering studies, which the public sector can have access and control during the construction period to ensure that the project is following the agreed pattern.</td>
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<table>
<thead>
<tr>
<th>Latent Defect Risk</th>
<th>X</th>
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<tbody>
<tr>
<td>Many PPP models involve transferring to the private operator pre-existing transport systems and infrastructure as a way to help upgrading, modernizing and expanding existing systems and financing the construction of new infrastructure. The private operator would usually assume responsibility for the maintenance of the existing facilities for the duration of the PPP agreement. While seemingly attractive, this mechanism can be costly for the private operators if the facilities they inherit have unknown structural faults. This risk can be minimized via thorough and well-documented inspections of facilities to be transferred.</td>
<td></td>
</tr>
<tr>
<td>Public sector agency should give full access to the facilities and information available in order to ensure all risks are adequately identified and factored in by the private sector before the PPP agreement is formalized.</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Exchange Risk</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost all PPP projects involve debt capital and, when money is borrowed abroad, foreign exchange fluctuations can threaten the project viability. Foreign exchange risk is greatest when project revenue flows come from weak currencies, putting projects in emerging economies at greater risk. In order to make PPP projects more attractive to the private investors, foreign currency risk can be assumed by sovereign guarantees issued by the governments, international financial institutions or export credit agencies arranged by the private sector partner.</td>
<td></td>
</tr>
<tr>
<td>This risk should preferably be assumed by the public sector as it can obtain far better conditions, especially with support of IFIs, thus reducing the overall...</td>
<td></td>
</tr>
</tbody>
</table>
### Inflation Risk

| Project costs. |  
|---------------|---|

Inflation involves risks over long-term that are typically outside the control of the private sector. During the operation phase, the inflation risk is usually allocated to the public sector through a provision for tariff indexation in the PPP agreements. Tariff setting falls under the responsibility of the public agency, also possessing the regulatory function of a given transport sub-sector. In turn, this would transfer the risk to the users of the transport systems or absorb (part of) it in case of existence of government subsidies. During the construction phase, the inflation risk is best allocated to the private sector in order to place a strong incentive to faster project completion. On PPP projects that the public sector (partly or fully) provides for financing of the infrastructure, fixed price contracting is used in order to transfer such risk to the private sector which in turn can mitigate it through hedging or purchase of insurance on its own cost.

### Political and Regulatory Risk

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|---------------|

One of the strongest impediments to increased infrastructure investment is political and regulatory risk, a major disincentive to private investors. Political & regulatory risk comes in many different forms. Assessments of the inherent strength and stability of a country’s political conditions are common in the investment field and are reflected in bond ratings prepared by internationally recognized rating agencies. As political risk increases, so does the cost of obtaining financing. The long duration of most concession agreements and the common aversion to (full cost recovery) user fees make PPP projects especially susceptible to political risk. Moreover, despite initial intentions, governments are not always able to maintain their commitments. This is particularly true on tolls and other user fees, which tend to be politically sensitive. This and other changes in regulations can have substantial effects on existing PPP agreements, and also weaken interest in future projects. Regulatory risk is exacerbated in countries where new and untested regulatory frameworks govern PPP projects or have comparatively little experience in project finance. Typical risks falling under this category include: project cancellation or scope change risk, expropriation risk, public acceptance/community risk, change of sector specific regulations change risk, taxation risk; restrictions in currency transfer or convertibility risk, judicial risks, etc.

Some mitigation measures can include: non-partisan alignment on transport infrastructure vision and strategic decisions, promoting cross-border and regional transport corridor projects and transnational programme management, contract rules that are adaptive in a predictable way, providing a range of dispute resolution options, political risk guarantees or insurances. In certain case, international development partners and IFIs can use their influence to help counter political risk or provide guarantees in the event significant risk changes occur. Bilateral agencies such as export credit agencies are also known for providing political risk insurance coverage to the private sector. The latter does however add costs to the project and consequently to the expected rate of return by the private sector.

### Other Risks

|  
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PPP projects are affected by a variety of risks, which the most important were considered above. There are however a number of risks that must not be neglected including: right-of-way acquisition, environmental and archeological risks, force majeure (acts of God, natural disasters, court orders, war, etc.); changes in labour legislation and employment practices, technology issues (failure of existing Such risks are country and project specific and respective allocation to either party needs to be considered on a case-by-case basis.
Selection of the most suitable PPP model for a given project is largely dependent on the risk allocation desired between the parties and should reflect the specific characteristics of the project and the strengths of each party. As a generic rule, the public sector should not transfer to the private sector partner risks that are under the public sector’s control, nor should it assume risks that are out of its control. The transfer of risks to the private sector partner brings, in general, an increase in the price of the project, so it is essential to ensure that the benefit of such transfer is greater than that increase in financial cost.

Public and private sectors often have very different views on the risks related to infrastructure projects. Potential investors might withdraw if they regard the risk as prohibitive or the predicted returns as too low. Meanwhile, governments might regard high-return expectations as “undue” if they fail to understand the risk assessment made by potential private sector investors.

### Need for appropriate Risk sharing

Appropriate risk allocation between the public and private sector can increase the VfM of a PPP project and can ultimately reduce the financial contribution from Government and/or the tariff required to be paid by users. Allocation of too much risk to the private sector will almost certainly result in downstream financial problems, just as allocating insufficient risk is not obtaining all the advantages of PPP.

Demand risk is however one of the most controversial risks present in transport projects. It refers to the uncertainty of project revenue caused by unpredictable future demand. International practice shows that demand risk is often better shared between the private and public sector and should not be imposed entirely on the private party which often leads to project failure.

Some risks, such as construction delays, cost overruns or operational setbacks, can usually be transferred to the private sector. Similarly, the responsibility for inflation and foreign exchange risk is usually assigned to, and accepted by, the public sector.

Improved risk allocation reduces not only economic cost but also the need for renegotiation and provides incentives for sound management of the PPP. In this respect, there are at least two issues from the public sector’s standpoint, which any risk allocation matrix must carefully address. These include:

- Ensuring an adequate level of monitoring and control over the transport infrastructure and delivery of a transport service to the user communities;
- Ensuring service quality at affordable prices to transport facility users.

### 3.1.3 Step 3: Definition of the roles and responsibilities of each party

Once the overall allocation of main project risks has been accomplished, the public sector agency and potential private sector partners need to define the roles and responsibilities to be allocated to each party in the PPP project. The table below provides an appreciation of the requirements to be met at each project stage in order to enhance the value of the PPP approach.

<table>
<thead>
<tr>
<th>Project Stage</th>
<th>Requirements for defining the roles and responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>The party taking on the role of project designer should prove to be able to develop designs</td>
</tr>
</tbody>
</table>
that provide lower overall life-cycle costs (not only construction cost) for the project. This should be allocated to the private sector if it can bring more innovation and efficiency to the design process than the public sector, thus generating value for money.

**Construction**
The responsibility for construction should be allocated to the party that is in the best position to construct the facility to the specifications in a shorter period. Consideration should be given to the capacity to undertake the overall project management and secure goods and services required for the project most quickly and competitively. The public sector agency usually encounters time restrictions posed by the public procurement processes, whereas the private sector developer would follow its practices. Experience also shows that the private sector is much more attentive to avoidance of cost overruns and adopts careful construction management strategies.

**Financing**
Project financing responsibility must be assigned to the party that can secure the most competitive financing for the project. Cost of borrowing for many African countries is high, as shown by credit agency ratings, and government budgets can rarely afford the required capital investment of major transport projects. Experienced private sector developers have access to the foreign capital markets, equity investors and investment banks at favorable rates, especially if they possess a good track record of past successful delivery and debt payments. However, financing options available to the public sector, thanks to favorable interest rate conditions and grace periods for project loans offered by IFIs, should not be neglected. Additionally, innovative financing mechanisms involving guarantees to cover not only sovereign risk but also project revenue risk coupled with grants blending could provide very interesting options that significantly raises the project value and the benefits that the public sector can draw on the PPP project. As a generic rule, involvement of both private and public sectors in project financing is preferable for PPP projects, be it even in the form of guarantees only by the public sector.

**Ownership**
It is common that if financing is mainly provided by the private sector, this will require ownership over project assets during the concession period. However, if restrictions on ownership transfer is posed by the legislator or by a political decision, the benefits of public ownership must outweigh the cost of financing the project. Both parties must show understanding and flexibility depending on the project specific context.

**Operations and maintenance**
This role is covered by the party that is in a position to operate the transport facility and provide the required service levels in the most efficient way. This is actually the key rationale for private sector involvement in delivery of transport services.

### 3.1.4 Step 4: Project Budgeting

At this stage, the public sector need to make an estimation of the budget required to develop and implement the project, both construction and operation phases, based on the pre-feasibility studies carried out in the preliminary stage of PPP conception. The overriding budgeting principle for any project should be to match the project design with the real transport needs, thus avoiding that over-ambitious designs are financed and implemented. The final project cost would however be dependent on the financing costs of the capital required for implementation of the project. In this respect, a project financing plan will have to be developed, thus establishing the sources of finance for the project. The latter also has a great impact on the choice of the PPP model to adopt for the proposed PPP project.
3.2 Exploring the spectrum of financing options including innovative financing mechanisms

PPP projects are generally financed using project finance arrangements. In project finance, lenders and investors rely either exclusively or mainly on the cash flow generated by the project to repay their loans and earn a return on their investments. For a new-build project involving complex PPP schemes requiring financing to be provided mainly by the private sector, the latter usually sets up a specially created project company which will enter into a PPP agreement with the public sector agency for the construction and operation of the transport project.

It is important to stress that the project finance structure should be designed to optimize the costs of finance for the project. Different financing sources can be arranged involving a combination of both conventional finance and innovative financing mechanisms. Conventional financing tools involve debt and equity instruments, guarantees, subsidies, and investment grants whereas other tools such as blended financial products, cash-flow guarantees, project bonds and other forms for raising money from the capital markets or mobilize savings can be considered as innovative financing mechanisms for infrastructure development. The following provides a summary of possible project financing sources.

**Loans**

Traditionally, the debt instruments for major PPP transport projects assume the form of long-term loans from investment or commercial banks and IFIs. Loans are classified as senior, mezzanine and junior. Senior loans enjoy priority in terms of repayment over all other forms of finance. Mezzanine loans are subordinated in terms of repayment to senior loans, but rank above equity, likewise the junior loans that is usually provided by the private sector sponsors, in lieu of equity investment.

IFIs also provide loans for major transport projects that meet certain development criteria. Financing conditions depend on the project type and the security offered by third parties (other banks or financial institutions or the government). Interest rates can be fixed, revisable or convertible (i.e. allowing for a change of interest rate formula during the lifetime of a loan at predetermined periods). Repayment is normally on a semi-annual or annual basis. Grace periods for capital repayment may be granted for the construction phase of the projects.

**Equity**

Equity is usually provided by the private sector investors, acting as projects sponsors. The project development company may include one contractor that will build the transport facility and another one that will operate the facility during the project life. Sometimes there is only one contractor if it has the capacity to handle both the construction and operation phases. The prospective contractor/operator may also provide equity capital. Additionally, investment banks are involved in equity investment. Development banks may also provide junior equity through grant investments. A large part of the equity (often referred to as “quasi-equity”) provided by the investors may actually be in the form of shareholders subordinated debt, for tax and accounting benefits. Since equity holders bear primary risks under a PPP project, they will seek a higher return on the funding they provide.
**In-kind contribution**

This is a form of financing provided by the public sector partner, notably as in-kind equity contributions to a PPP project through the transfer of existing transport infrastructure assets.

**Grants and Subsidies**

Grants are unremunerated equity provided by the public sector. These may come in the form of investment grants or tax cuts subsidies aimed at reducing the initial investment and overall project cost. On certain projects, these may be needed to make a project bankable or affordable. Specific tax cuts or subsidies are usually offered by the national governments.

The regional transport corridors have the potential to benefit from grants by the IFIs and development banks. International development partners have also developed other forms of grants as institutional support and technical assistance for preliminary studies or PPP transaction advice in order to ensure quality, efficiency and sustainability of the PPP projects, especially for those projects being funded by IFIs.

Despite the origin of the grant provider, grants would formally count as a contribution by the public sector partner to the overall PPP project financing package.

**Loan Guarantees**

This is a form of indirect contribution provided by the banks of private sector sponsors or IFIs on behalf of the public sector partner aiming at helping a PPP project company to secure the amount of debt capital required to finance the project or a loan at favorable interest rates.

Various forms of guarantees are available for senior and subordinated debts. Guarantees however have a cost. The advantage of a guarantee would depend on the underlying financing structure of the operation. A guarantee from an IFI may provide significant leverage to the project company in securing a loan at better conditions than from a commercial or investment bank. Through loan guarantees, IFIs may play a vital role in facilitating the project financing.

**Blended Financial Products**

Blended finance is increasingly being used by international development partners to boost up infrastructure financing in Africa. The aim is to transform available resources, normally grants, into financial products such as loans, guarantees, equity, interest rate subsidies and other risk-bearing mechanisms. The blended financial products differ from the conventional ones in that they embed grant money, which is often critical to enable the issue of the product itself or has a multiplier effect on the number of similar products that can be offered by the financial institutions based on other funds available or that can be potentially raised by the market.

The lead development partner would ensure the establishment of a Fund\(^5\) where other multilateral development partners or bilateral partner countries can contribute. In addition, a management body to oversee the use of the available resources will have to be established. The management of the Fund

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\(^5\) As an example, see the Africa Investment Facility (AfIF) created under the EDF blending framework.
is then delegated to a lead international or regional financial institution.

**Cash-flow Guarantees**

A blended financial product that is particularly critical for transport infrastructure projects is the Cash-flow Guarantee for the project company to cover the revenue risk which cannot otherwise be effectively managed or mitigated by the private sector partner (e.g. minimum revenue guarantee for a toll road). The cash-flow guarantees substantially enhance credit quality, thereby encouraging a reduction of risk margins in the interest rates applied to senior project loans. Savings made on the lower interest rates should surpass the cost of the guarantee. Such guarantees have a limited duration, usually lasting from five to seven years after project completion.

Cash-flow guarantees are usually offered by the development banks through blended finance, facilitated by grants, in order to make the cost of cash-flow guarantees affordable for the project company.

**Project Bonds**

Project Bonds are an innovative infrastructure financing tool whose objective is to stimulate capital market financing for large-scale transport infrastructure projects. It is a debt instrument issued by the project companies (instead of direct contracting of loans) to attract additional private finance from institutional investors such as insurance companies and pension funds that are looking for long-term investments.

**Pension funds**

In situations of low bond market yields, pension funds may look for attractive long-term investment opportunities to diversify their holdings and meet their long-term payment obligations.

PPP project developers and governments in the developed and developing countries have turned their attention to capturing the financing potential of pension funds through Project Bonds instruments. The use of these instruments in most African countries however remains a challenge. Pension funds and other non-specialized institutional investors are concerned about the following issues when it comes to investing in infrastructure development:

- Absence of permanent stable cash flows;
- Most pension fund managers do not have the expertise to assess construction risk;
- It is difficult to organize multiple passive investors with limited sector experience to make key restructuring decisions when PPP projects face difficulties;
- Unlike loans that can be disbursed over time to match a project construction schedule, bond proceeds are generally drawn all at once on closure thus generating a financial cost for the issuing project company which may not need all the money at once.

**Local-currency bond markets**

Local-currency bond markets present a potentially important vehicle for developing the domestic investor base and mobilizing domestic savings to support public and private sector investment in the transports sector. However, local bond markets in many African countries remain underdeveloped.
Government action, particularly from the responsible ministries (e.g. Ministry of Finance) and central banks, is required to strengthen local financial markets and financial institutions.

**Diaspora bonds**

Diaspora bonds are debt instruments issued by a government, a sub-sovereign entity, or a private corporation aimed at raising finance from its overseas diaspora citizens. These bonds are often marketed at sensible times in a country and appeal to the diaspora’s patriotic feelings. Since there are usually strong ties, including family and property ties to the country of origin, the currency inconvertibility risk, usually a high cost for foreign private investors, is perceived as lower by diaspora investors. At a crucial time for major regional transport corridors development, great potential can be envisioned for this instrument. The PPP project companies, with marketing support of the African governments, should attempt to place project bonds to available diaspora investors.

**Sovereign wealth funds**

Sovereign wealth funds are an attractive source of financing for major transport projects especially for African countries possessing considerable oil or mineral resources reserves. Such funds are directly or indirectly owned by governments, which would allocate a substantial portion of current and future oil or mineral extraction revenues towards the fund. Investment in much-needed national or regional transport infrastructure and corridor development can be included in the funds strategy, which through their assets allocation mix can provide secure long-term return financing for infrastructure development.

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**Early involvement of IFI’s and development partners for consultation and support**

Since the establishment of a robust financing scheme for a PPP project is key to its sustainability, early involvement of potential project financiers in the PPP project preparation process is crucial, particularly when involvement of IFIs is sought. Financial support provided by the IFIs and/or international development partners, in the form of either loans or guarantees, is largely dependent on the proposed transport project ability to meet its intended development objectives. The regional transport corridor projects must prove to be economically viable, financially feasible, technically sound, and environmentally and socially aware. Technical assistance is often available to the public sector agency to help structuring and promoting the project in line with its development objectives and proving its feasibility to the lenders, whilst still being attentive to the private sector expectations and requirements. Additionally the IFIs and development partners have certain requirements that must be met in all projects including: clear demonstration of public benefit and value for money; transparency in procurement and implementation; evidence that best international standards are adopted in project design, need to assure affordability of tariffs by the user communities, etc.

It is important to stress that the governments have a crucial role to play in promoting PPP approaches for the development of major regional transport corridor projects in Africa and ensuring them of having an economic and social dimension. To this end, the public sector agencies vested with the responsibility to structure the PPP projects are expected to carry out a very active role not only during planning and budgeting phase, by sounding out the market and engaging in an effective dialogue with the private sector, but also, and most importantly, during the phase of investigating the whole range of available funding sources.

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6 In recognition of the importance of local markets as secure source for infrastructure financing, IFIs are helping to develop a stable local bond market in Africa. As an example the IFC is issuing local currency bonds in Central Africa to kick-start the development of local currency bond markets. Additionally guarantees for local currency bonds are also available to facilitate local capital market development. An example include those provided by the UK’s GuarantCo.
3.3 Designing fair and balanced PPP Agreements

Different PPP models exist, each with increasing degree of private sector involvement based on the extent of risk and responsibility transfer to the private party. These range from simple PPP models where the private sector participation is limited to management or operation and maintenance of transport systems to more complex PPP models that require significant investment by the private sector, up to partial or total divestiture of the transport infrastructure assets previously owned by the public sector through privatisation of the state owned company. (see further Annex 2 that provides the key characteristics of main PPP models).

The design of a contract agreement the best responds to the requirements of a specific PPP transport project requires a considerable amount of work from the Government. Even if the Government hires consultants to do much of the work required for a bidding process, many tasks will still be under the direct responsibility of the Government. Only Government officials are expected to defend and justify the project to the public, or any organization challenging the project. Invariably, some form of Project Steering Committee needs to be created to handle this work.

3.3.1 Coping with deficiencies of the regulatory framework

Although the national legislative and regulatory frameworks in many African countries are continuously evolving, this should not deter the responsible public agencies to continue seeking for private sector involvement in development of transport projects. There are many ways to cope with integration of the uncertainties caused by evolving regulatory frameworks such as:

- Initially, choosing a PPP arrangement that is less exposed to risks associated with the changes in legislation, for example operation and maintenance contracts, and after few years looking at more complex PPP schemes;
- Incorporating explicit safeguards in contracts regarding changes in law since this is often a major concern for international investors. Governments are best placed to control legislative and regulatory risks and these are often allocated to the public sector partner although in some cases there could be shared arrangements; and
- Designing PPP schemes aimed at private sector partners prepared to manage legislative / regulatory risk, for example, in the case of adverse foreign currency or profit repatriation rules, utilization of national private companies or partnerships thereof that are not exposed to the risk may be more viable; etc.

3.3.2 Duration of the Agreement

Private sector operators will naturally aim to maximise the length of the PPP (concession) agreements to safeguard their cash flow and maximise on their return on investment. The aim of competition legislation on the other hand is to promote open market access, reduce the possibility of monopolies and ensure the public benefit. One must strike the right balance between these two requirements. As a generic rule, the higher the amount of risk transfer to the private sector and the higher its financial contribution, the longer should be the PPP agreement period.
3.3.3 Ensuring adequate risk allocation between partners

The guiding principle of risk allocation is that risk should be allocated to the party best able to manage it. Cost effective allocation of risks between parties results in lower costs for delivery of the transport infrastructure facility and services and provides enhanced value for money.

It is therefore critical to properly assess the capacity of the prospective private sector contractors to manage a certain type of risk and their ability to control it.

A critical risk affecting most transport projects and particularly roads is the demand risk. This relates to demand for the actual use of the transport facility in terms of the current and future traffic that the facility is able to generate.

Many private sector investors, and likewise lenders, may be reluctant to take on this risk under a tolling system, especially for newly built roads where no existing historic data on traffic levels and/or robust projections exist. The same applies in cases of alternative routes with high risk of traffic diversion.

While structuring the PPP, a way to cope with this scenario is to ensure integration of cash flow guarantees in the project financing scheme which are triggered if the traffic volumes fall under specified limits. For instance, the PPP scheme can provide, on the one hand, to set a cap on toll charges in order to encourage the maximum use of the facility and, on the other hand, require the public sector to provide subsidy support to the private operator’s cash flow.

Alternatively, where the environment is perceived to be hostile to real tolls, the shadow tolling system where no actual tolls are collected from road users, instead the shadows tolls are paid by the Government to the operator, based on traffic counts on the road and an agreed rate per vehicle/vehicle type. The more the road is used, the more the concessionaire is paid. Sometimes, a banding mechanism is attached which applies different shadow toll payments to different levels of traffic. It requires continuous traffic counting which adds to transaction costs and presents various difficulties for accurate and consistent application. While subsidies or shadow toll charges conflict with the user pay principle, it can at least be used to introduce the PPP approach and prepare the way for real toll roads in due course where trade and economic activities along the regional transport corridors have started to prosper and the industry is prepared to greater risk taking on traffic volumes and patterns.

3.3.4 Statutory process

One of the areas in which risk transfer is most problematic is the statutory process. The statutory process involves obtaining the necessary permissions to undertake a project in accordance with the law and regulations, to ensure that the project is carried out in an orderly manner and that its impact on the public and individual interests is taken into account.

Statutory requirements could include obtaining planning permission or the preparation of an Environmental and Social Impact Assessment and dealing with necessary resettlement. Likewise, PPP divestiture schemes require adequate cushioning of the social and economic impact on former employees of the public transport operator. Carrying out public and/or community consultation processes is thus required in all cases.
The statutory process gives rise to significant risks including: the process taking longer than expected; the process costing more than expected; consent being subject to a number of conditions; risk of legislation changes leading to additional statutory process approvals, etc.

As a general rule, the public sector agency is best placed to manage the statutory process by virtue of its authority, experience and resources. International private sector partners are usually reluctant to absorb the statutory risk, especially in the road sector. Main difficulties include:

- lack of familiarity with the national statutory processes and procedures in many African countries;
- uncertainty regarding the cost and timescale of such processes and their ability to manage these;
- reluctance of sponsors and lenders to finance the costs and risks associated with the statutory process; and
- the need for price adjustment and/or negotiation to cater for changes arising during the statutory process.

3.3.5 Project Agreement

This is the main legal document setting out the rights and obligations of the public sector agency and the private sector contractor. Many model contracts exist but changes will need to be made to account for national and project specific requirements. Overall, the PPP Project Agreement should incorporate provisions that aim to:

- provide effective public services and guarantee the continuation of services in a manner which addresses the transport service user needs and safeguard the general public interest.
- ensure contract fairness amongst the parties which includes a balanced distribution of risks and benefits, and in particular the tariff setting mechanisms need to be transparent and equitable,
- promote effective regulation and monitoring to ensure that contract terms are respected and the interests of all parties protected.
- ensure contractual flexibility to meet changed circumstances
- provide for an effective dispute resolution mechanism.

A vast range of issues needs to be addressed in order to ensure balanced and fair contract conditions for a PPP project. Key contract elements to focus on, include:

<table>
<thead>
<tr>
<th>Critical contract elements in a PPP Agreement</th>
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<tbody>
<tr>
<td>• Adequate technical standards, output specifications, financial and operational performance specifications, service levels and quality standards set for the project</td>
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<tr>
<td>• Construction period and performance bond requirements</td>
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<tr>
<td>• Operation period and re-investment and maintenance requirements</td>
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<tr>
<td>• Performance monitoring mechanism</td>
</tr>
<tr>
<td>• Tariff setting and payment mechanisms</td>
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<tr>
<td>• Profit and cost sharing provisions,</td>
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<tr>
<td>• Assets ownership status and hand back requirements at the end of agreement</td>
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<tr>
<td>• Changes in legal status and rights and obligations of parties, including potential changes in the</td>
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</tbody>
</table>
3.4 Ensuring effective and transparent procurement process

Procurement is often one of the aspects with the greatest potential for conflicts causing major delays or failures in the PPP process. A common complaint from the private sector concerns the perception of fairness of the PPP tenders. They often question if the tender is fair enough to warrant the investment in time and money for developing a tender proposal, which could be considerable and quite involving especially for complex PPP projects. The public agency should therefore handle the PPP procurement process with great care and enforced diligence compared with other projects.

Overall, the public agency, responsible for procuring and contracting the PPP project, must ensure that the principles of “equality of treatment” and ‘transparency’ are clearly adhered to throughout the procurement process. Consequently, the public procurement laws pose some limitations to the possibility of the public authority interacting with the private sector bidders during the procurement process.

The public agency should therefore take advantage of all opportunities to interact with the private sector at the earlier stages of the PPP process in order to achieve the optimum level of PPP structuring, leverage on the know-how of the private sector, enable it to attract adequate finance for the project, and eventually maximise the benefits deriving from the PPP. All consultation processes should also be driven by the afore-mentioned principles.

The typical tasks of the public authority before launch of the procurement process include:

- Selection of the most appropriate tender procedures to follow
- Development of objective evaluation criteria, including minimum technical and performance standards
- Clear definition of the negotiation and contract award procedures, etc.

When preparing the tender documents, special attention should be paid to developing tender specifications which state the desired end goals but leave the bidders to propose solutions; and defining strict performance criteria and monitoring systems that closely bind the future operators to their bids.

National public procurement laws would normally provide for a number of different procurement procedures, including:

- Open Procedure – whereby any interested party can tender.
- Restricted Procedure – whereby any interested party may submit a request for pre-qualification and may tender if successfully pre-qualified.
- Negotiated Procedure – which offers the possibility for post-tender negotiations on contract
The public sector agencies should however recognize the limitations that traditional public procurement procedures could present, such as: these are usually designed to operate under conditions of certainty; do not allow extensive consultation and interaction between the parties, which is essential to the development of the PPP partnership; they are usually focused on lowest price, whereas PPPs may also target other aspects; they force tender specifications to be complete and therefore leave little room for variations.

The open procedure is generally not considered suitable for PPPs due to scale and complexity issues and significant bidding costs that PPP projects entail. The restricted procedure is most commonly used for a range of PPP projects where it is possible to make an adequate project definition and the nature of works or risks attached to would usually allow overall pricing.

For complex PPPs involving significant investment requirements and risk transfer to the private sector, at times, this procedure presents some difficulties as the project may not be fully defined with certainty and would further benefit from interaction with actual private sector proponents. A negotiated procedure should therefore be accepted and integrated in the procurement process.

It should however be noted that many countries are developing specific PPP or concession legislation which overcomes the restrictions posed by public procurement procedures for traditional works and service contracts and provides for much more flexibility in procurement of complex PPP projects.

Further development or updating of PPP or concession laws contributes to improvement of the regulatory framework for PPPs and helps overcoming issues that may be encountered with traditional public procurement rules.

<table>
<thead>
<tr>
<th>Reasons for PPP project delays or cancellations</th>
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<tbody>
<tr>
<td>The reasons can lie anywhere in the project cycle – from project selection, design and procurement to supervision and monitoring. Unsuccessful PPP projects usually lack a robust and independent feasibility study, with a strategic sector assessment. Alternatively, sometimes the problems lay in the underdeveloped judicial or regulatory framework, which could not guarantee the necessary legal protections for as complex a transaction as a PPP.</td>
</tr>
<tr>
<td>In other instances, projects are undermined on the revenue side as a gap emerged between users’ willingness to pay and commercially viable toll rates. Users’ unwillingness to pay, combined with a poor sharing of demand risk, and the perception of non-transparent procurement process, often contributes to public resistance to the proposed PPP.</td>
</tr>
</tbody>
</table>

Source Private Participation in the Transport Sector – lessons from recent experience in Europe é Central Asia – the World Bank 2009

4 Ensuring sound and effective monitoring during PPP projects implementation

The delivery of transport services through PPP approaches requires institutional and regulatory changes in national systems. This is primarily because the role and responsibilities of the public sector
will change with increased private sector involvement.

The public sector will see its function transforming from a provider of transport infrastructure and services to an oversight and monitoring agency to ensure that the respective roles and responsibilities set out in the PPP/concession contract are fulfilled and that the concessionaire activities over the concession period are implemented in a timely fashion to avoid any penalties and ensure delivery at the price and quality standards as agreed to.

At the same time, institutional issues form an equally important element for an effective monitoring of a PPP project. This will require that the public sector agency establishes an appropriate mechanism to manage the implementation of the PPP agreement, once it is signed, such as establishing a PPP Contract Management and Performance monitoring unit.

4.1 Contract Management Plan

The overall aim is to develop a framework in which the contracting agency and the concessionaire can work in partnership together. The Contract Management plan should not be too complex in order to maximize its effectiveness and avoid costly activities that are often difficult to enforce.

Contract management starts with well-designed draft contracts during project preparation/procurement and includes agreement during the negotiation process. Contract management continues over the life of the project with the effective management and monitoring of critical project functions through the appropriate Contract Management plan and through an effective institutional structure.

The contract management activities should also allow for mutually acceptable changes in the Concession agreement.

It must be stressed that the Contracting Authority must manage its own activities and although it monitors the Concessionaire’s activities, it does not manage the work of the Concessionaire which must retain full management authority of its own. Therefore, the Contracting Authority should not interfere with the Concessionaire’s day-to-day management activities.

However, the Contracting Authority’s responsibilities and duties will still remain extensive. In particular, the contracting agency must ensure that there will be in place effective systems for performance monitoring, quality management and management of information. During project operations, the Authority must also undertake spot checks to ensure these systems are actually in place and working.

<table>
<thead>
<tr>
<th>Contract Management Plan: issues to be addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clearly defined outputs, performance levels and objective information requirements.</td>
</tr>
<tr>
<td>• Penalties in case of default.</td>
</tr>
<tr>
<td>• Roles and responsibilities in monitoring and information provision.</td>
</tr>
<tr>
<td>• commencement and other key dates of activities.</td>
</tr>
<tr>
<td>• Cost bearing agreement for all Contract Management activities.</td>
</tr>
<tr>
<td>• Reporting of results arrangements.</td>
</tr>
<tr>
<td>• Dates and service releases in specific sectors.</td>
</tr>
</tbody>
</table>
• Payment mechanisms.
• Mechanisms for benchmarking and testing where relevant.
• Managing change mechanisms e.g. changes in law, bidding, control etc.
• Mechanisms for problem solving and resolving disputes.
• Contingency arrangements in case of failure or default.
• Rights of the contracting agency.
• Other as may be necessary for particular projects management with stakeholders.
• Contingency plans for dealing with emergencies.
• Frameworks for independent auditing.
• Public Consultation Needs.

4.2 PPP Contract Performance Monitoring

Effective monitoring of operations of the private sector is crucial to ensure satisfactory long-term service delivery and non-reversible risk transfer. It is therefore critical for the Contracting authority to set out, during the procurement stage, the basic framework under which the contract performance monitoring will function. The private sector should therefore be provided with a clear indication of the type and frequency of information required for monitoring purposes.

At the start of the PPP contract, the drafting of a contract performance monitoring manual is advisable. It will set out the overall contract management strategy, management tools and processes and list the management tasks to be undertaken by the public agency.

A monitoring and reporting plan needs to be agreed upon with the operator regarding the tasks that each party needs to undertake and the appropriate timeframes for their completion. In order to enable the public agency to effectively monitor the implementation of the project, the service provider (Concessionaire) will need to provide a series of operational and financial data on an ongoing basis. The contracting authority should limit its request for information to the data necessary for effective monitoring of the project. Excessive data collection imposes an unnecessary burden on the operator.

Performance monitoring is one of the most important contract management function that relates to the monitoring of the transport service delivery by the private operator and the assessment of performance relative to the standards defined in the output specifications. Performance monitoring assumes even more importance on occasions where the public agency will have to make periodic payments for transport infrastructure services provided by the private operator (e.g. under shadow tolling system\(^7\) or availability payments\(^8\)), which will be related to the achievement of specific output targets.

Effective monitoring is therefore critical, as it will determine whether or not the private sector operator is in compliance with the contract terms and therefore the amount of payment due. Performance monitoring ensures that the transfer of operation risk made in the contracting agreement is affected. Any failure by the Contracting Authority to implement effective performance monitoring of the PPP/concession contracts may result in operation performance risk reverting to it, resulting in dissatisfaction of user communities and eventual failure of the PPP.

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\(^7\) Means toll based on usage of the facility but payable by the Public Authority rather than the road users

\(^8\) Means the fixed-charge element of a tariff, payable whether or not the product or service is provided, intended to cover debt service and equity return as required under the project agreement, although not normally a separate element in services fees.
### 4.3 Contract management and performance monitoring tasks

Main contract management and performance monitoring tasks during the operation phase are presented in the table below:

| Contract Management Tasks | • Enforcing the agreed monitoring arrangements involving the monitoring obligations of the public agency and the private operator, the provision of facilities by the operator for monitoring by the public agency, and the procedures for determining compliance;  
|                          | • Implementing the payment mechanism, including enforcing the conditions required for the commencement of payment and the basis for ongoing certification (frequency, measurement basis, variations, and specific conditions);  
|                          | • Reviewing the financial performance and position of the operator against the forecasts set out in the financial model and enforcing any arrangements for tariffs capping, subsidy allocation or revenue sharing;  
|                          | • Monitoring compliance with specific conditions of contract in relation to insurance policies, indemnities, tax clearance certification, safety procedures and systems;  
|                          | • Management of risks allocated to the public sector including compensation to the private sector in the event of failure by the public sector to cover for its risks;  
|                          | • Management of risk consequences arising out of substandard service delivery by the operator including: cases of continued under-performance resulting into the public agency having to enhance the scale, nature and frequency of its management and monitoring tasks; cases of non-compliance requiring proposals for rectification and calculation of payment deductions;  
|                          | • Establishing and implementing the procedures and protocols for dealing with changing requirements over the life of the project and change management if/when certain contractual provisions materialize in relation to items such as technological developments, changes in law, changes in volumes, changes in requirements of the public agency, etc.;  
|                          | • Management of interactions between the private sector operator and the public sector agencies requiring organisational interfaces and information flows. The interfaces may cover network management issues, the effects of new planning and development, interdependence with other projects or public agency activities, for example, traffic management in a roads network;  
|                          | • Management of contingency for default arrangements to cover default on the part of the operator where the continued delivery of the service is at risk, including step-in rights;  
|                          | • Management of the end of contract conditions covering maintenance requirements, the condition of the assets at the expiry of the contract period and preparing the public agency to re-tender for provision of the service. |
| Performance Monitoring Tasks | • Check the accuracy of the measurements of specified parameters carried out by the operator relating to load conditions and performance of the transport facility;  
|                          | • Analyse the measurements to determine whether the levels of service defined in the output specifications are delivered;  
|                          | • If a compliance failure is identified, determine the financial consequences of under-performance both in payment penalties and the operator’s obligations to remedy the default;  
|                          | • Carry out independent monitoring to verify that the monitoring undertaken by the operator is accurate and valid;  
|                          | • Carry out independent calibration of measurement equipment used in the delivery of the transport service to verify its accuracy. A failure to implement equipment calibration may result in a failure to detect unsatisfactory performance or an overpayment for service... |
Given the long lifecycle of PPP contracts, unforeseen changes in contractual specifications (during construction or operation) are not unusual. The Contracting authority needs to address these issues by striking a satisfactory balance between encouraging the private sector to maintain and manage its risks and ensuring the viability of the PPP project. Contract renegotiations require careful analysis and dialogue between the parties before contract changes are agreed and implemented. Lastly, the use of an experienced, trusted and neutral facilitator may be beneficial.

4.4 PPP Contracts Management and Performance Monitoring Unit

In order to reflect the change of responsibility from “provider of infrastructure” to “enabler of PPP projects”, a unit specifically dedicated to contract management and performance monitoring of the PPP project needs to be established within the public sector agency, even before the award of the PPP contract. In addition, the knowledge and expertise developed by the Contracting authority during the PPP Procurement stage, need to be maintained during the whole project implementation, from the Construction to the Delivery stage, in order to ensure consistency of approach and effective monitoring of the process.

Staffing

The implementation of a PPP project requires the acquisition of key skills by the public sector. The identification of the skills and expertise needed for contract management and performance monitoring and the recruitment of staff must take place in the early stages of the PPP project in order to ensure that assigned staff will have a full understanding of the PPP process.

The expertise required may, however, not exist at the onset of PPP projects within the public sector. Consequently, external advisors may be required, either through a consulting firm or individual consultants with direct experience in procurement for PPP transport projects. However, the risk in using external consultants is that in-house knowledge remains low and that the country may remain dependent on external consultants for longer periods.

In this regard, individual consultants may be preferable if they are able to couple their advisory functions with an effective on-the-job training program in order to develop in-house knowledge for the public sector agency.

Budgeting

From the onset, it is necessary for the public agency to establish a realistic financial and resource budget to cover the costs relating to contract management and performance monitoring.

Adequate budgeting for this structure is extremely important given the interests at stake. This should be possible without significant efforts if it is proved that there is an absolute benefit for the country to implement projects through a PPP modality.
5 The role of the RECs for promotion of PPP’s

The expansion of PPP projects in the transport sector requires building the institutional cooperation platforms at the regional level in order to enable, promote and facilitate a coordinated and sustainable large-scale private investment in the main transport corridors in Africa.

Despite individual PPP projects are essentially to be implemented at national level, effective and efficient development of transnational transport corridors requires a coordinated approach at the regional level. This necessitates elaboration of a comprehensive PPP program for corridor development encompassing individual national projects with PPP potential.

Moreover, the implementation of a PPP strategy at the national level requires the acquiring of key skills in the public sector to prepare and manage projects at country level, to develop and implement policy and regulatory reforms. Yet, establishing PPP units at national level takes time. Countries may have to go through studies on whether and how to establish PPP units in addition to obtaining technical assistance and then setting up the PPP units may require a further period.

Consequently, it is felt that by establishing PPP Regional Networks, including representatives from national PPP Units where these exist, could well play the harmonisation role and support the establishment of a Common Regional PPP Framework to refine, develop and ultimately harmonize as far as possible the member states’ PPP policies, legal frameworks and institutional arrangements across the region.

The main role of PPP Regional Networks could be to:

- Assist in national capacity building for both public and private sectors
- Harmonisation of laws for regional integration purposes
- Up-to-date information on PPP practices, policies, regulations and procedures to enable and facilitate PPP’s in infrastructure at the national level
- Assistance to start up PPP units
- Mobilise international development partners and IFIs for financing of PPP projects within the REC
- Provide a forum for member States to share experiences and key lessons learned
- Assist in development of regional best practices and incorporate appropriate international best practices and trends
- Provide a regional data base for PPP projects and skills that may be accessed by member States

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**SADC PPP Regional Framework**

*A Common Framework concerning Policy, Institutional Arrangements and Legal Frameworks in SADC*

SADC PPP Regional Framework is based on the Draft Regional Strategy Paper submitted to the Steering Committee in September, 2012 with a comprehensive set of recommendations for SADC Member States concerning the adoption of a common regional PPP Framework relying on lessons learned from the review of other countries’ PPP policies, institutional settings as well as the legal issues and individual implications for SADC Member States. It embodies...
important principles and guidelines agreed upon in the Steering Committee concerning PPP Frameworks for SADC Member States developed as a common point of departure for all those institutions, public bodies and entities involved in the implementation and promotion of PPPs.

This PPP Regional Framework is for SADC Member States to refine, develop and ultimately harmonize hereupon as far as possible their PPP policies, legal frameworks and institutional arrangements across the region. It serves SADC Member States to follow at national level the principles laid out in this document in order to have a unified and harmonized approach towards the implementation of PPP policies, the establishment of the framework concerning PPP institutional and legal structures across the SADC region.

Source: Extract from SADC PPP Regional Framework, SADC 3P: Public-Private Partnership Network and SADC DFRC: Development Finance Resource Center

Notwithstanding the important role that PPP regional networks can play, accelerating the development of regional transport corridors through PPP approaches requires enhanced integration of structures at the regional level that, in addition to the above, possess capacity to coordinate the PPP programs for transport corridor development and support the member states to adopt an integrated approach towards the implementation of national PPP projects along the corridor.

Consideration may be given to establishing Regional PPP Facilitation Units to operate in close interaction with Corridor Development and Management Institutions. In addition to the role of regional networks, their role should encompass the elaboration of the required PPP programs for corridor development, carry out preliminary studies and provide a repository of information on PPP opportunities to facilitate the corridor development, which potential sector investors and operators could refer to.

Another responsibility could be to identify “champions” within each country. Experience shows that no large government project can be implemented without it being “championed”. These champions are key individuals in the national government who can show a strong interest in the possibility to undertake a national project planned under the transport corridor through a PPP approach.
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7 Annex 1. Main PPP Types

Model 1. Service Contracts

Public agencies can enter into service contracts with the private sector companies for the completion of distinct tasks during the lifecycle of transport infrastructure projects. Service contracts are well suited to operational requirements and are often used for the procurement, operation and maintenance of new equipment. Outsourced tasks could include areas such as toll collection, the installation and maintenance of systems and equipment or the provision and maintenance of vehicles or other technical systems.

Service contracts are generally awarded on a competitive basis and extend for short periods of time of a few months up to a few years. They allow public agencies to benefit from the particular technical expertise of the private sector, manage staffing issues, and achieve potential cost savings. Nonetheless, with service contracts management and investment responsibilities remain strictly with the public sector. Service contracts cannot address underlying management or cost issues affecting poorly run public organizations.

Model 2. Management Contracts

A management contract is an arrangement by which a private company is entrusted with various types of tasks usually performed by the public authority, relating to the organizations of road maintenance operations. Usually, the function of the private firm is to respond to day-to-day routine maintenance requirements on behalf the public entity.

Management contracts may be used as a means to transfer responsibilities to the private sector for a specific facility or a service that was normally provided directly by the public agency as infrastructure owner. Nonetheless, responsibility for investment decisions remains with the public agency.

Model 3. Performance-based maintenance contracts

When the public infrastructure owner does not wish or does not possess the required capacity to maintain an infrastructure facility, it can hire a private contractor with more autonomy in the design and organization of the works. Remuneration is based on a monthly fee determined in the contract and linked to performance indicators.

In PBC, the client does not specify any method or material requirements. Instead he specifies performance indicators that the contractor is required to meet when delivering maintenance services. For example, the contractor is not paid for the number of potholes he has patched, but for the output of his work: no pothole remaining open (or 100% patched). Failure to comply with the performance indicators or to promptly rectify revealed deficiencies adversely affects the contractor’s payment through a series of clearly defined penalties. In case of compliance the payment is regularly made, usually in equal monthly installments.

Model 4. Operation and maintenance concessions (service concession or lease)

Leases provide a means for allocating to the private sector responsibilities to operate and maintain an already existing road whereby the Government may grant a concession to the private participants to
charge user tolls to help finance the improved operation and maintenance of the road. Such a concession shifts the financial burden of operation and maintenance to the road users.

This type of concession enables the public sector to transfer commercial risk to the private sector and to create incentives for the private sector to ensure efficient revenue collection and to undertake regular maintenance to increase the reliability of facilities.

**Model 5. Build-Operate-Transfer (BOT)**

Under a BOT, the responsibility of the concessionaire is not limited to operation and maintenance of the infrastructure but also comprises an initial construction, upgrading or major road rehabilitation component. Massive investment and consequent mobilization of private funding sources is therefore required from this company and is to be repaid from the revenue collected from road users (usually tolls). BOT (Build Operate Transfer) stresses the responsibility of the private entity during construction and operation of the road and the handing over (transfer) of the assets to the public entity at the end of the operation period. The high initial investment required from the private sector and the consequent long concession period make the distribution of risk between the parties a key element of success in such schemes.

BOT-type of concessions offer further advantages of increased value for money through efficiencies in construction costs as well as plant and labor management and to circumvent public budget constraints and to mobilize investment funds rapidly through project finance non-recourse funding. However, tendering and contracting may initially be lengthy procedures if there is little previous experience in the country.

In the BOT-type concession, private sector participants typically establish a project company and, after securing an exclusive license from the host government or contracting authority (concession agreement), construct, control, operate and maintain a project for a determined length of time (concession period). The private sector participants then transfer the project company assets back to the host government after the period has elapsed.

Many variations on this type of contract have been implemented with a consequently growing number of acronyms used to label them (DBFO, BOOT, BTO).

**Build-operate-transfer (BOT) or Build-own-operate-transfer (BOOT):** these expressions refer to projects where a contracting authority selects a concessionaire for the financing, construction, operation and maintenance of an infrastructure facility, and the said concessionaire is given the right and assumes the obligation to operate the infrastructure facility commercially at its own risks, by collecting fees and other charges from its users, for a given period of time at the end of which the facility is transferred to the contracting authority.

**Build-transfer-operate (BTO):** this expression is sometimes used to emphasize that the infrastructure facility becomes the property of the contracting authority immediately upon its completion, the concessionaire being awarded the right to operate the facility for a certain period.

**Build-rent-operate-transfer (BROT) or Build-lease-operate-transfer (BLOT):** these are
variations of BOT or BTO projects where, in addition to the obligations and other terms usual to BOT projects, the concessionaire rents the physical assets on which the facility is located for the duration of the agreement.

**Build-own-operate (BOO):** this expression refers to projects where the concessionaire owns the facility permanently and is not under an obligation to transfer it back to the contracting authority.

**Design-build-finance-operate (DBFO)** is sometimes used to emphasize the concessionaire’s additional responsibility for designing the facility and financing its construction.
### Annex 2. Characteristics of Main PPP Models

<table>
<thead>
<tr>
<th>PPP Modality Type</th>
<th>Main Features</th>
<th>Risk Transfers</th>
<th>Access to private finance</th>
<th>Ownership</th>
<th>Comment</th>
</tr>
</thead>
</table>
| 1. Service Contract               | • Certain services are outsourced to a private company.                        | • Service contracts provide a relatively low-risk option for expanding the role of the private sector. | • Limited infusion of private capital i.e. working capital.       | • Government* | • This type of PPP has limited benefits.  
• Service contracts can be a competitive form of operational type PPPs, and require a well-developed service industry.  
• Not suitable for initial Toll Road development / investment. |
| 2. Operation and maintenance contract (O&M) | • Management and operation of a public infrastructure is outsourced to a private company.  
• Similar to a service contract but the scope of services is wider with greater control passed to the private company. | • Similar to the service contract with additional risk of keeping the facility up to certain technical standards.  
• No equity risk borne by the private company. | • Limited infusion of private capital i.e. working capital.       | • Government | • Suitable for projects with a significant operating content.  
• O&M could be applied to a BOT, BOOT, BOO, ROOT and ROO project.  
• A method to import private sector efficiencies and technical know-how.  
• Not suitable for initial Toll Road development / investment. |
| 3. Build Transfer/ or Annuity Type | • Private company finances the infrastructure.  
• Private company builds the infrastructure.  
• Upon completion of construction, the infrastructure is transferred to the government.  
• Government pays the private company on an agreed schedule the total cost, plus a reasonable markup. | • Private company only assumes construction risks.  
• No equity risk is borne by the private company. | • Much greater infusion of private capital i.e. for construction. | • Government | • Suited to capital projects where the government can retain operating responsibility.  
• The government might end up paying more, as it is in effect borrowing from the private sector.  
• Can be suitable for toll roads but limited benefits  
• Can be suitable for high risk and/or low financial return projects |
<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Build Operate Transfer (BOT)</td>
<td>Government finances the facility. Private company builds the facility. Private company operates the facility on a concession. At the end of the O&amp;M concession the facility is transferred to the government.</td>
<td>Government bears the equity risk. Private company bears the risks associated with the construction. Limited access to private finance.</td>
<td>Government bears the equity risk. Private company bears the risks associated with the construction. Limited access to private finance.</td>
</tr>
<tr>
<td>5. Build Operate Transfer (BOOT)</td>
<td>Private company finances the facility. Private company builds the facility. Private company operates the facility on a concession. At the end of the concession the facility is transferred to the government. Also known as DBFO in UK: Develop-Build-Finance-Operate.</td>
<td>Private company assumes equity and other commercial risks. Private company assumes construction risk. Significant infusion of capital for construction and working capital for operation and maintenance.</td>
<td>Private company until transfer</td>
</tr>
<tr>
<td>6. Rehabilitate Own Operate Transfer (ROOT)</td>
<td>Same as a BOOT/BOT. But for the rehabilitation of an existing facility rather than the construction of a new one.</td>
<td>As in BOOT</td>
<td>As in BOOT</td>
</tr>
</tbody>
</table>
### 7. Build own operate (BOO) and Rehabilitate Own Operate (ROO) (Effectively regulated Divestiture)

| • Similar to a BOOT, except that the facility is not transferred to the government. |
| • Operation and maintenance typically outsourced to another private company. |
| • But for the rehabilitation of an existing facility rather than the construction of a new one |

<table>
<thead>
<tr>
<th>As in BOOT</th>
<th>As in BOOT</th>
<th>• Private company</th>
</tr>
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<tbody>
<tr>
<td>• Suited to projects that involve a significant investment/operating content.</td>
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<tr>
<td>• Market risk may be lower if there is a demand history.</td>
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<tr>
<td>• The step before privatization and can be a good solution for toll roads.</td>
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</table>

### 8. Privatization

| • Initial public offer (IPO), wholly or partly of a state-owned company (SOE). |
| • Partial divestiture means government still owns a percentage of the SOE. |
| • Total divestiture means the SOE has been completely privatized i.e. the company is now 100% owned by the private sector. |

| • The private company is responsible for all aspects hence risks in infrastructure provision. |
| • Private company funds future developments of the business. |
| • Private company |

| • Need to establish a strong regulatory body to prevent abuse of monopoly power. |
| • Suitable if government wants to import private sector efficiencies into the SOE. |
| • Privatization can be politically controversial. |
Table of Contents

1 Background .................................................................................................................................... 2
2 The RECs Structure & Organization ........................................................................................... 4
3 RECs Relations with Member States ........................................................................................... 5
4 RECs Relations with the African Union Commission (AUC) ......................................................... 6
5 Coordination Mechanisms ........................................................................................................... 9
  5.1 The African Peer Review Mechanisms (APRM) .................................................................. 9
  5.2 Capacity Survey of the Regional Economic Communities in Africa ............................... 9
1 Background

The Treaty of Abuja (Nigeria) in 1991 and ratified in 1994 aims at reducing the fragmentation of the African continent by promoting the integration of the African economies and building larger economic zones. The African Economic Community (the Community) was established by

According to the Abuja Treaty, regional economic integration is to be achieved in six phases over 34 years.

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<thead>
<tr>
<th>AFRICAN CONTINENT - ECONOMIC INTEGRATION IN SIX PHASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: creating new RECs and strengthening existing RECs (by 1999)</td>
</tr>
<tr>
<td>Stage 2: stabilizing barriers to regional trade (by 2007)</td>
</tr>
<tr>
<td>Stage 3: establishing a free-trade area (FTA) and a customs union for each REC (by 2017)</td>
</tr>
<tr>
<td>Stage 4: coordinating tariff and non-tariff systems among RECs (by 2019)</td>
</tr>
<tr>
<td>Stage 5: establishing an African Common Market and common policies among RECs (by 2023)</td>
</tr>
<tr>
<td>Stage 6: establishing an African Central Bank, creating a continental monetary union and electing the first Pan-African Parliament (by 2028)</td>
</tr>
</tbody>
</table>

To attain these objectives, the Abuja Treaty has recommended the establishment of Regional Economic Communities (RECs) in order to facilitate the regional economic integration between members of the individual regions through cooperation, coordination and harmonization of policies.

In addition to the Abuja Treaty, the AU also adopted the “New Partnership for Africa’s Development” (NEPAD) in 2001, with the aim of “repositioning Africa globally, eradicating poverty and placing the continent on the road to sustainable development” NEPAD is supposed to provide a framework which stresses the imperative role played by the RECs in the effort to address Africa’s development and regional cooperation and integration process/ integration challenges.

RECs are considered the primary agents designated to implement NEPAD’s agendas and programs, among which regional economic integration and infrastructure projects to “promote regional economic integration by bridging Africa’s Infrastructure gap.”

At the Banjul Summit (July 2006), the African Union has officially recognized eight RECs as “building blocs for continental integration” or key vectors for a successful regional integration, with the AUC playing the role of Africa’s “premier continental integration organization.” Other intergovernmental agencies not officially recognized by the African Union as RECs are designated as “Sub Regional Economic Communities” (SECs).

At the January 2012 AU Summit, the Heads of states from around the Continent renewed this objective by agreeing to speed up plans for economic integration. The tone of the 2012 Summit

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1 The framework of the Abuja Treaty has provided for the existence of eight Regional Economic Communities (RECs) in Africa’s five sub-regions; the Arab Maghreb Union (AMU), the Common Market for Eastern and Southern Africa (COMESA), the Community of Sahel-Saharan States (CEN-SAD), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Economic Community of West African States (ECOWAS), the Inter-governmental Authority on Development (IGAD) and the Southern African Development Community (SADC).

2 Three economic and monetary unions: WAEMU (West African Economic and Monetary Union)/ UEMOA (Union Economique et Monétaire Ouest Africaine) and CEMAC (Communauté Économique et Monétaire d’Afrique Centrale) and the Southern African Customs Union (SACU)
implied an ambitious AU agenda of promoting and coordinating African integration and its accompanying benefits more quickly than before.

For the 50th Anniversary of the OAU/AU in 2013, at the 24th AU Ordinary Session (January 2015 Addis Ababa Ethiopia). The heads of States have adopted the AGENDA 2063 “to rededicated ourselves to the enduring Pan African vision of “an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the Global arena”3 (Agenda 2063: The Africa We Want);

The Agenda 2063 recognizes also “the critical role of Regional Economic Communities as building blocks for continental unity” RECs are seen as an essential instrument for the effective implementation of the Agenda 2063.

If properly conceived and implemented, regional integration offers numerous advantages to developing economies. Closer trade links among such economies have the potential of strengthening their capacity to participate in world trade.

Countries can thus overcome obstacles caused by the relatively small size of the domestic markets, by offering producers opportunities to realize greater economies of scale and benefits from the establishment of regional infrastructure.

However, and so far, this objective of regional integration, and promotion of Africa’s integration into the global economy has been slow and marred by delay and stagnation, despite numerous efforts and working committees formed by AUC to coordinate the RECs. While certain RECs have made progress in some priority areas, the benefits of integration have not been achieved as timeously as was intended.

There are a number of reasons to explain why African countries have trouble in translating the political will into stronger economic integration

Even when the RECs, like in the case of ECOWAS, have transformed themselves into a “real integration organization with what the entire concept entails from a legal perspective, notably the partial abandonment of sovereignty”4, this political will did not match the high expectations, thus reducing the effectiveness of the decisions taken.

The lack of political will on the part of REC member states to relinquish control of state sovereignty to a regional body is easily understood. Few countries on the Continent seem to be prepared for the partial surrender and the pooling of sovereignty, which is critical for the success of any regional integration scheme.

Many protocols have been signed but remain unimplemented, due to absence of effective sanctions against defaulting member states and weak enforcement and implementation capacity. Lack of

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3 “By 2063, the necessary major infrastructure in Transport, Energy and ICT will be in place to support Africa’s accelerated integration and growth, technological transformation, trade and development, in particular through the PIDA transport corridors and strengthening the African port and shipping sector as regional and continental assets”.

4 An assessment of Progress towards Regional Integration in the Economic Communities of West African States since its inception May 2015
political will and commitment has been reflected in the failure to meet target dates set for the attainment of objectives. But this not the only reason

Consequently, it is necessary to understand better the reasons why different countries are reluctant to move forward on regional integration and not taken fully into account benefits of regional integration against its costs.

Among the reasons why the regional integration process has been set back, it has been noted a “deficiency of explanation about the benefits of economic integration to citizens”, so the democratic leaders of member states do not feel pressure to improve their progress. In addition, national governments fear a loss in tax revenue, and, despite the elimination, border tariffs, in principle different domestic tax rates still exist within each RECs.

This introduction to the RECs will successively review

1. The RECs as Institutions:
2. RECs relations with Member States
3. RECs relations with the African Union;
4. Coordination mechanisms

2 The RECs Structure & Organization

Heads of Member States, meeting one or twice a year, represent the authority responsible for the overall policy direction of a REC. A Council of Ministers is responsible for overseeing the functioning of the REC. It can issue directives on matters concerning coordination and harmonization. It can approve the work programs of REC.

An executive secretariat or Commission is in charge of all executive functions of a REC, including financial responsibilities.

Commissions are usually divided into several specialized Technical Commissions as the units responsible for the preparation and monitoring of the cooperation programs. One of these generally covers “Transport, Communications” activities under a Commissioner of Infrastructure” and another one covers “Trade, Customs, Taxation, etc.”. All activities in the field of trade liberalization and customs cooperation usually fall under a Commissioner of Trade.

The involvement of two different technical commissions to address closely related transport and facilitation issues is certainly not conducive to a great efficiency to monitor and improve goods and vehicles movements along the corridors. In addition, each of these technical commissions is only staffed by few professionals whose capacity tends to be limited against all the activities expected of them. There is an urgent need to review the structure of the RECs and to have them properly staffed with sufficient professionals of the right caliber to carry out these pivotal tasks.

The two Reports on the RECs make some suggestions:

In one report, it is suggested to establish three divisions:
• Division of regional transport planning to provide an integrated multimodal transport for better, efficient, and cost effective transport services.

• Division of transport facilitation with mission to address trade facilitation measures and strengthen the sub regional legal framework:

• Division of road freight, monitoring road freight industry, freight forwarders & Multimodal operators in terms of access to the trucking profession, standards, regulation and enforcement.

The other report reviews the organizational structure and staffing of the transport divisions of COMESA, EAC, IGAD and SADC and note that all suffer from a lack of staff and office responsible to cover the different areas where these RECs are supposed to intervene.

The question of restructuring the RECs will be addressed in a more systematic way following the Validation Workshop in the final version of the Guidelines. It is certainly a priority if the RECs wanted to be allowed to play the essential and required role in the development and reinforcement of their regional corridors.

3 RECs Relations with Member States

Although, the Abuja treaty does not lay out the top-down steps for achieving the RECs objectives, RECs were all created to promote economic cooperation through a top down decision making process.

There is, in fact, a need to revisit the entire decision-making process and to streamline the role of REC towards Member States and other national stakeholders.

The usual top down/ad-hoc approach through which decisions are made by the head of states with the RECs then in charge to translate these decisions into specific measures to be implemented at country level suffer from the fact that such approach does not take sufficient account of the specificities of each country and the degree of involvement from relevant national stakeholders.

As in fact highlighted in the Abuja Treaty, the implementation of the regional integration lies within the competence of Member States in order “to create favorable conditions for the development of the Community and the attainment of its objectives, particularly by harmonizing their strategies and policies. They shall refrain from any unilateral action that may hinder the attainment of the said objectives”. (Article 5)

Furthermore, “each Member State shall, in accordance with its constitutional procedures, take all necessary measures to ensure the enactment and dissemination of such legislation as may be necessary for the implementation of the provisions of the Treaty”.

In other word, the process of regional integration is built from decisions taken at the RECs level that the Members States are requested to implement.

It is suggested on the opposite, a bottom-up approach as also noted in the Report reviewing RECs activities in the sector of transport in West and Central. The identification of regional programs should
start at national level, and only be allocated to the RECs only those areas that clearly need regional coordination or cooperation.

The proposition is that RECs should intervene only when and where a valid case has been made that there is sufficient reason to recommend that a given issue is better carried out by a REC rather than by Member States, based on the principles of subsidiarity and partnership. The principle of “subsidiarity” in this case is defined as the recognition of the capacity of the Member States to take decisions and to take actions with interventions by a REC only when the objectives of an action cannot be sufficiently achieved by the member states, and is better achieved at regional level ‘by reason of the scale and effects of the proposed action’.

Consequently, priority should be given to strengthening formal and informal interfaces between REC’s and countries and to develop soft mechanisms of dialogues with “willing” or “reformist” Member States, including all the stakeholders (the private sector, the civil society) concerned at country level in such a way that they can call for and/or support regional initiatives.

Within such an approach, RECs could work in priority with sub groups of Member States willing to play an effective role in identifying regional initiatives. The success achieved could then engage the other Member States that may not have initially the will to move towards integration to participate in the project under an extension phase. On the other hand, the approach should be inclusive of all stakeholders. There is a need for mobilizing national investors as well as the broad civil society in such a way that they can complement and/or support the regional initiatives. The inclusion of these stakeholders should entail adequate capacity enhancement to enable them to play an effective role.

4 RECs Relations with the African Union Commission (AUC)

Relations between the RECs and the AUC need also to be reviewed and reinforced.

A Protocol on the Relations between the African Union and the Regional Economic Communities was concluded in Addis Ababa on January 2008 between the African Union and the seven economic communities.

The Protocol aims at formalizing, consolidating and promoting closer cooperation among Regional Economic Communities and between them and the African Union through the coordination and harmonization of their policies, measures, programs and activities in all fields and sectors.

Under the Protocol, the AU is directly charged with working to facilitate and to implement regional integration and in consultation with the RECs to determine the progress of regional economic integration and thereafter design appropriate programs to accelerate the integration process.

In charge of monitoring the continent’s integration process, the AU Commission is in principle expected to act as the primary vehicle for the advancement of regional integration, and for the promotion of Africa’s integration into the global economy.

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5 To date the Arab Maghreb Union did not sign the protocol
The working relations between the African Union (AU) and the RECs have been defined in the 2008 “Protocol on Relations between the African Union and the Regional Economic Communities (RECs).”

<table>
<thead>
<tr>
<th>Protocol on Relations between the African Union and the RECs.</th>
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<tbody>
<tr>
<td><strong>Objectives (article 3)</strong></td>
</tr>
<tr>
<td>formalize, consolidate and promote closer co-operation among the RECs and between them and the Union through the co-ordination and harmonization of their policies, measures, programs and activities in all fields and sectors;</td>
</tr>
<tr>
<td>establish a framework for co-ordination of the activities of RECs in their contribution to the realization of the objectives of the Constitutive Act and the Treaty;</td>
</tr>
<tr>
<td>strengthen the RECs in accordance with the provisions of the Treaty and decisions of the Union;</td>
</tr>
<tr>
<td>establish a co-ordination mechanism of regional and continental efforts for the development of common positions by its members in negotiations at the multilateral level;</td>
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<tr>
<td>encourage the sharing of experiences in all fields among the RECs and ensure harmonization of their cooperation with potential donors and international financial institutions;</td>
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<tr>
<th><strong>General undertaking (article 4)</strong></th>
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<tr>
<td>The Parties undertake, to co-ordinate their policies, measures, programs and activities with a view to avoiding duplication thereof. To this end, the Parties shall:</td>
</tr>
<tr>
<td>cooperate and coordinate the policies and programs of the RECs with those of the Union;</td>
</tr>
<tr>
<td>exchange, at all appropriate levels, information and experiences on programs and activities and implement the provisions of this Protocol;</td>
</tr>
<tr>
<td>promote inter-regional projects in all fields; and</td>
</tr>
<tr>
<td>support each other in their respective integration endeavors and agree to attend and participate effectively in all meetings of each other and in the activities required to be implemented under this Protocol.</td>
</tr>
</tbody>
</table>

If the African Union hopes to realize its goal of a united Africa initially by 2028 (Treaty of Abuja) and more likely by 2063, it will require the African Union Commission (AUC) to resolve the numerous obstacles still to overcome especially considering that the AUC does not have the authority to overcome poor capacity, lack of political will, or other challenges that African countries may face or bring to the table.

While the AU should exercise leadership in countries that seem not to have the domestic political will to move towards integration, AUC should consider expanding its efforts to coordinate regional initiatives within low-capacity countries and to ensure that future programs are better targeted and more visible.

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Further, UAC could also more vigorously assist in mobilizing resources and coordinating their application toward regional infrastructure projects to boost trade.

UAC can also more closely oversee and facilitate the long and difficult negotiations of protocols, and may use scorecards and penalties while monitoring their implementation to ensure that states feel pressure to meet their commitment.

All these require obviously within AUC in the transport sector a reinforcement of the Department of Infrastructure and Energy (AUC/DIE) in order to work closely with the RECs.

More works need also to be done to establish the “framework for co-ordination of the activities of RECs” and “a co-ordination mechanism of regional and continental efforts for the development of common positions”.

<table>
<thead>
<tr>
<th>FACTORS ACCOUNTING FOR THE POOR PERFORMANCE</th>
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<tbody>
<tr>
<td>• Lack of complementarity of member countries’ production structures.</td>
</tr>
<tr>
<td>• Lack of political will to mainstream regional commitments and agreements into national plans to ensure the success of the process.</td>
</tr>
<tr>
<td>• Weak national and regional institutions.</td>
</tr>
<tr>
<td>• Lack of coordination and harmonization of economic policies.</td>
</tr>
<tr>
<td>• Lack of involvement of other stakeholders – the private sector and civil society - in the cooperation and integration process.</td>
</tr>
<tr>
<td>• Inadequacy of human and institutional capacity for the design and implementation of cooperation and integration programs.</td>
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<tr>
<td>• Inadequate infrastructure.</td>
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<tr>
<td>• Poor perception and assessment of costs and benefits associated with the process:</td>
</tr>
<tr>
<td>• High incidence of conflicts and political instability.</td>
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<tr>
<td>• Poor design and inadequate sequencing of regional integration arrangements.</td>
</tr>
<tr>
<td>• Multiplicity and overlapping membership of regional integration schemes and mandates.</td>
</tr>
<tr>
<td>• Inadequate funding of regional integration process and related institutions.</td>
</tr>
</tbody>
</table>

SOURCE: Challenges facing Africa’s Regional Economic Communities in Capacity Building – the African Capacity Building Foundation, 2006

To conclude, the African Union is subject to the same kind of debate as other regional communities: what balance of powers do African Member States want to have? What role should be granted to the African Union Commission and how autonomous should it be to implement its Strategic Plan in the long-term if the AU hopes to realize its goal of a united Africa by 2028 or by 2063.

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7 While the Abuja Treaty provides for eight RECs in Africa’s five sub-regions, there are currently fifteen regional economic organizations in existence, resulting in inconsistencies, duplication and competition for resources. This ‘spaghetti-bowl’ membership complicates policy coordination and facilitates confusion and lack of communication between national governments, regional organizations and the AU, resulting in objectives which are incoherent and uncoordinated.

8 « A prosperous Africa based on inclusive growth and sustainable development »
5 Coordination Mechanisms

A “framework for co-ordination of the activities of RECs” and “a co-ordination mechanism of regional and continental efforts for the development of common positions” are still to be put in place.

Two recent initiatives go in that sense:

5.1 The African Peer Review Mechanisms (APRM)

The African Peer review Mechanisms (APRM) was initiated in 2002 and established by the AU as part of the New Partnership for Africa (NEPAD) initiative. Between 2003 and 2014, the mechanism operated as an independent body under a Memorandum of Understanding signed by Member States. The APRM was formally integrated into the AU system in June 2014.

The Mechanism’s primary objective is to foster the adoption of policies, standards and practices of political and economic governance that lead to political stability, accelerated sub-regional and continental economic integration, economic growth and sustainable development. Performance and Progress are measured in four thematic areas: i) democracy and political governance; ii) economic governance and management; iii) corporate governance; and iv) socio economic development.

Each review leads to a national program of actions to address problems identified for the Member States concerned. A monitoring body prepares a six month and an annual report on progress in implementing the program of Action to be submitted to the PRM Forum of Heads of States and Governments. Country review report are made available to the public.

So far, 17 Peer Reviews self-assessment have been completed and been peer –reviewed by the Forum.

5.2 Capacity Survey of the Regional Economic Communities in Africa

The aim of these Capacity Surveys of the Regional Economic Communities in Africa are to reappraise the capacity needs of the eight African Union (AU) approved RECs in line with their new strategic thrusts, current and prospective development imperatives and the need to provide strategic guidance to the key development partners to the RECs in relation to their strategic programming.

Objectives of the survey are to:

- Review the regional integration agendas of the eight RECs, distilling their key strategic thrusts and thematic pillars
- Take stock of the progress made in strengthening the human and institutional capacity of RECs since the publication on the 2006 survey
- Undertake a capacity needs assessment of the eight RECs while taking advantage of the opportunity to survey any on-going capacity building programs and the partnerships thereto;
- Develop a comprehensive capacity building strategy for each of the eight the RECs, complete with an estimated budget and financing strategy; and
• Prepare the Second Edition of the RECs Capacity Survey Report, in line with the findings.
MODULE 8 ROLE OF THE RECS: PILLARS OF THE AFRICAN INTEGRATION

MODULE 8.2 Establishing an Institutional Framework for RECs Transport Development and Management in West and Central Africa

By Dominique Njinkeu¹

Executive Director, African Trade and Sustainable Development (AFTSD)

Table of Contents

Acronyms and Abbreviations............................................................................................................2
1 Introduction/Background and Context........................................................................................3
2 A Revamped Role for the Recs in the Transport Sector ..........................................................3
3 RECS Areas of Intervention in the Transport Sector .............................................................7
  3.1 Build and sustain a consensus for transport reform ......................................................... 7
  3.2 Improving Intermodal Efficiency Along the Transport Corridors ................................. 9
  3.3 Harmonizing and Enforcing Transport Regulations, Standards and Procedures...... 11
  3.4 Facilitate transit traffic and border procedures............................................................ 12
    3.4.1 Land-Border Crossing.............................................................................................. 13
    3.4.2 Modern Transit Regime.......................................................................................... 14
4 Organizational Restructuring and Human Resource Requirement .....................................18
5 Review of the Decision Making Process...............................................................................23
6 Financial Issues .....................................................................................................................27
7 Recommendations................................................................................................................29
8 References.............................................................................................................................31

¹ I am grateful for comments and suggestions on earlier draft by Virginia Tanase (IRU), Olivier Hartmann (World Bank), Niels Rasmussen (Saana consulting, previously with West Africa Trade Hub), Manuel Henriques (World Bank) and Ephrem Asebe (World Bank consultant). I benefited from research assistance and comments from Patricia N. Njinkeu.
# Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ALCO</td>
<td>Abidjan-Lagos Corridor</td>
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<tr>
<td>ATWA</td>
<td>Accelerating Trade in West Africa</td>
</tr>
<tr>
<td>BA</td>
<td>Borderless Alliance</td>
</tr>
<tr>
<td>CEMAC</td>
<td>Economic and Monetary Community of Central Africa</td>
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<tr>
<td>CICOS</td>
<td>Commission Internationale du Bassin Congo Oubangui-Sangha</td>
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<tr>
<td>CMI</td>
<td>Corridor Management Institutions</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>ECCAS</td>
<td>Economic Community of Central African States</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FCFASA</td>
<td>Federation of Clearing and Forwarding Association of Southern Africa</td>
</tr>
<tr>
<td>FESARTA</td>
<td>Federation of Eat and Southern African Road Transport Associations</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning System</td>
</tr>
<tr>
<td>IRU</td>
<td>International Road Transport Union</td>
</tr>
<tr>
<td>ISRT</td>
<td>Inter State Road Transit</td>
</tr>
<tr>
<td>JAPES</td>
<td>Joint Africa European Union Strategy</td>
</tr>
<tr>
<td>OPA</td>
<td>Observatoire des Pratiques Anormales</td>
</tr>
<tr>
<td>OSBP</td>
<td>One Stop Border Post</td>
</tr>
<tr>
<td>PRFE</td>
<td>Programme Régional de Facilitation des Echanges</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Economic Communities</td>
</tr>
<tr>
<td>RFNTB</td>
<td>Regional Forums on Non-Tariff Barriers</td>
</tr>
<tr>
<td>SARA</td>
<td>Southern Africa Railways Association</td>
</tr>
<tr>
<td>SASTALC</td>
<td>Southern Africa Shippers Transport and Logistics Council</td>
</tr>
<tr>
<td>SSAIPE</td>
<td>Sub-Saharan Africa Transport Program</td>
</tr>
<tr>
<td>TFA</td>
<td>Trade Facilitation Agreement</td>
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<tr>
<td>TFW</td>
<td>Trade Facilitation Weeks</td>
</tr>
<tr>
<td>TIR</td>
<td>International Road Transport</td>
</tr>
<tr>
<td>UEZOA</td>
<td>Union Economique et Monétaire Ouest Africaine</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WAEMU</td>
<td>West African Economic and Monetary Union</td>
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<tr>
<td>WAMZ</td>
<td>West African Monetary Zone</td>
</tr>
<tr>
<td>WCA</td>
<td>West and Central Africa</td>
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<tr>
<td>WCO</td>
<td>World Customs Organization</td>
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</tbody>
</table>
1 Introduction/Background and Context

1. **The White Paper on Transport Policy has outlined a set of policy actions aligned with the Joint Africa European Union Strategy (JAEPS).** These actions fall into three strategic objectives (i) improve and extend connectivity of regional corridors in order to boost continental and inter-country trade; (ii) reduce logistics transport costs for all modes of transport to foster exports and reduce the costs of imports; and (iii) improve overall governance of the sector. The improved governance is to be achieved by developing, implementing and effectively enforcing regulations that foster fair competition within and between transport modes. Such improvement should be characterized by the elimination of abnormal practices including overloading, which affects safety and infrastructure (already victim of inefficient maintenance systems).

2. **Countries need to articulate multi-country comprehensive, integrated multimodal regional transport as well as logistics investment and reform programs that jointly help address the above objectives.** Regional Economic Communities (RECs) provide the framework for such multi-country efforts by ensuring there is sustained commitment at the highest levels of governments and acceptance from regional and foreign private operators. The development of Transport Sector Guidelines, a process within which this paper has been written, seeks to translate these policy recommendations into practical instructions for Corridor Management Institutions (CMIs) and RECs. This paper offers practical recommendations for strengthening the role of RECs (CEMAC, ECCAS, ECOWAS and UEMOA) in the transport sector of West and Central Africa (WCA); it will be complemented by another discussing the role of CMIs and recommendations for monitoring performance along transport corridors in WCA. We start with an assessment of the strengths and weaknesses of WCA RECs and other regional organizations with an attention to the extent to which they can promote and monitor regional transport in the framework of the JAPES. Particular attention is paid to the institutional, financial and human resources requirement for developing regional transport corridors. The role of RECs will be most effective if undertaken as part of an intensive process for cross-learning and cross-fertilization – drawing on the lessons from best practices-- within each region as well as from peers in Africa and the rest of the world.

2 A Revamped Role for the Recs in the Transport Sector

1. **The history of RECs and their underlying administrative, legal and regulatory philosophy are key factors that determine the role they can play in the implementation of the recommendations laid out in the White Paper.** These structural factors explain their capabilities and limitations when it comes to the question of leading in regional transport infrastructure and policies. In terms of achievements, WCA countries have made significant progress in creating the institutions that could lead ambitious regional transport programs. However, there is a need to distinguish the de jure from de facto existence of institutions; WCA lags other African regions in terms of implementation. This gap is largely a result of their history.
WCA RECs were all primarily created to promote economic cooperation through a top-down decision-making process dominated by national governments. Summits and ministerial conferences made bold decisions often not implemented, partly because of insufficient accounts of relevant evidence and lack of interest or insufficient involvement from relevant stakeholders. This occurred primarily because the Secretariat of these RECs were insufficiently staffed and empowered. Furthermore, the regional agenda was undermined by pervasive internal governance, managerial shortcomings, leadership deficiencies, and the vested interests of regional and international players. Because of insufficient local ownership most regional programs are not implemented. The proliferation of actors with their own specific interests and overlapping mandates made the task of defining coherent regional transport programs and projects daunting. These factors limited the bargaining power as well as the capacity of private sector and civil society organizations to act and influence core regional policies in a coherent and effective manner.

2. The relationship between the RECs and Pan-African agenda is covered under the Protocol on the Relations between the African Union and Regional Economic Communities concluded in Addis Ababa, Ethiopia, on January 27, 2008. The Protocol recognized in WCA the Economic Community of West African States (ECOWAS) and the Economic Community of Central African States (ECCAS), two RECs that also comprise the Central African economic and monetary Community (CEMAC) and the West African economic and Monetary Union (UEMOA). The Protocol aims to serve as the building blocks to an African Common Market by formalizing, consolidating and promoting closer cooperation among RECs and the AU through coordinated and harmonized policies, measures, programs and activities in all fields and sectors. These RECs commit to review their treaties so as to establish an organic link with the Union and to align their programs, policies and strategies with those of the Union.

3. WCA is a very heterogeneous region comprising fragile states, landlocked countries, Sahelian countries, forested countries and sparsely populated middle income countries.; In a recent African Regional Integration Index (ARII) prepared by the AU, UNECA and AfDB, WCA was ranked below average with a score of 0.461 (0.421 for ECOWAS and 0.451 for ECCAS). These regions are characterized by inadequate interconnected national transport networks; with the situation more problematic in Central Africa. In Central Africa the Consensual Transport Development Plan of ECCAS adopted in 2004 envisaged all capital cities to be connected by paved roads by 2010. As of 2013 only Yaoundé in Cameroon was connected to the capital cities of Gabon and Equatorial Guinea. The region has a strategic position in relation to realizing the pan African transport ambition. Rwanda, Burundi are members of the EAC, DRC is member of COMESA and SADC. As a result, ECCAS programs and policies should automatically be aligned with the Tripartite Free Trade Area (TFTA). The East-West interconnection of the African Economic Community (AEC) agenda also requires the alignment of policies and programs of ECOWAS and ECCAS.
4. **A shift towards an inclusive and bottoms-up approach to regional decision making will ensure the recommendations of the Transport White Paper are implemented.** Regional programs should build from actions at the national level and involve all stakeholders, particularly those in the regional and international private investors which often operate across several countries within each region, and therefore are strong promoters of regional integration. The Commissions need to shift away from an ad-hoc decision making approach that often does not include an associated implementation plan or a systematic accountability framework. Regional institutions should be empowered to take advantage as well as explore windows of opportunities to act as informal broker and implementer of regional transport decisions. This should be particularly effective if actions are pulled and/or coordinated with ‘willing’ or ‘reformist’ states and through ‘soft mechanisms’ of dialogue and persuasion. Priority could be given to strengthening formal and informal interfaces, dialogue mechanisms and coordinating structures with Member States through a practical variable geometry. In such a process, only sub-groups of countries served by a (sub) regional transport project could form a process through which decisions are made and implementation ensured.

5. **The legal systems and the administrative organization at the national level are important factors to consider when defining the role of RECs in the transport sector.** Decisions at the regional level are considered international law and these need to be transposed into national legislation, otherwise their implementation will not be possible. This transposition process varies depending upon whether the country operates within a monist or dualist system. In monist states such as in the ECCAS and the ECOWAS Francophone countries, ratified regional decisions are automatically incorporated nationally and are legally enforceable. For these countries, once decisions are made at summits and ministerial conferences the process of making them legally enforceable is simple. This is not the case for English speaking ECOWAS members following a dualist system. In these countries special and sometimes complex legislative procedures must be followed. Regional decisions become part of national law upon a ratification and transposition process in accordance with constitutionally established procedures. This structural difference between Anglophone and Francophone countries can also be extended to the administrative organization. Francophone countries have inherited a highly centralized administrative system; as a result, the process of ceding powers to a supranational level tends to be smoother. This is not the case for their English speaking counterparts. The UEMOA and CEMAC countries have tended to cede more authority to the regional organization than countries in ECOWAS. In light of these differences, an ambitious program will need to ensure RECs have the human, financial and institutional capacity to oversee the process to its normal end; from which implementation is possible. We shall return to this point on the organizational restructuring of WCA REC’s transport departments.

6. **The WCA’s private sector and civil society is weak and its para-public firms have traditionally dominated private investment.** This dynamic has implication on the strength and weakness of non-state actors, including foreign operators particularly those in Francophone
countries who are closely aligned to French foreign aid policies. This has several implications. First the WCA region suffers from the biggest implementation deficit of regional decisions. Numerous reports assessing the progress in regional integration find that on paper Central Africa has complied with most of its obligations in relation to African regional integration. However, using any logistical performance or cross-border trade facilitation indicator, the 2016 African Regional Integration Index report by the AUC, AfDB and UNECA found that Central Africa significantly lags behind others. This report also identified the East African Community (EAC) as a region that has made significant progress; the majority of the best practice cases used as illustration in this paper are from the EAC.

7. **The failure to create corridor authorities in WCA combined with weak RECs makes realizing the objectives of the White Papers within the timeframe of the Continental Free Trade Area(CFTA), a daunting task.** The two most successful experiences towards creating CMI in WCA are the UEMOA observatory of abnormal practices (Observatoire des Pratiques Anormales (OPA)) and the private sector-led Borderless Alliance (BA). These initiatives are not corridor authorities like the Maputo corridor. The OPA has been limited to recording and disseminating bad practices along the West African corridors such as road blocks or multiple checks points. The initiative has not collected information which could help uncover the deficient policies that need to be reformed to address the core drivers of high transport costs and prices. The OPA has been largely an UEMOA led program that has attracted donor funding and limited private sector participation. The Borderless Alliance (BA) on the other hand has been facilitated by the USAID, is anchored on the interests of the private sector and has mobilized over 55 operators in its logistic supply chain. Box 1 below summarizes the structure and achievement of BA. There is now a planned joint venture between UEMOA and ECOWAS to consolidate the OPA and BA for the West Africa Transport Observatory. In Central Africa the EU has supported the scoping for a central African corridor. The Commission Internationale du Bassin Congo_Oubangui- Sangha (CICOS) has also explored the monitoring on multi-modal transports corridor in the Congo Basin. These initiatives in Central Africa have not yielded results. In designing the governance and operations of these corridor management institutions, a concerted effort should be made to incorporate the prevailing contexts in the transport sector of WCA so that an adequate division of labor between the Secretariat of the RECs and these CMIs can be ensured. One problem with the above initiatives has been the absence in WCA of a clear definition on what is to be measured and for what purpose. Particular attention should be paid in building a consensus among all stakeholders on what the broad measurable objectives of the transport sector are; this should then guide the design of the CMIs on one hand and the agenda for the transport observatory on another.
3 RECS Areas of Intervention in the Transport Sector

3.1 Build and sustain a consensus for transport reform

1. The WCA regional integration and infrastructure challenges can be addressed through documenting and advocating for the potential benefits as well as the concrete benefits that accrue to stakeholders of the proposed reforms. The benefits of regional infrastructure development have been recognized by African governments for years. These benefits motivated the launch of several programs and projects that failed to yield the intended benefits. This failure was due in part to prevailing inter-related political, institutional, economic, and financial challenges not adequately factored in the design of programs. The first action going forward is to build political consensus among neighboring states that may have diverging national agendas and in some cases recent histories of conflict. This mission will necessitate, effective regional institutions that can implement collaborative infrastructure development programs, equitably distribute benefits, and execute programs across borders. Given the vast needs and limited
resources, some form of priority setting is needed to guide efforts on the regional integration agenda. Once the regional infrastructure is in place, its efficacy will ultimately depend on harmonizing the associated regulatory and administrative procedures.

2. **A requisite political consensus needs to be built to support these programs; this includes obtaining buy-ins at the highest level in the public and private sector.** Such a policy has been demonstrated to be effective in Eastern and Southern Africa. Much of the progress observed in that region has been achieved through increasing the private sector’s capacity to partner with governments. While the ingredients existed at the level of national governments, RECs and donors’ programs have played a catalytic role. For example, USAID supported the creation of the Southern Africa Railways Association (SARA), the Federation of Clearing and Forwarding Association of Southern Africa (FCFASA) and the Federation of Eastern and Southern Africa Road Transport Associations (FESARTA). Presently, the USAID has an on-going plan to support the Southern Africa shippers Transport and Logistics Council (SASTaLC). Much like Eastern and Southern Africa, the donor community and the governments in the WCA will need partnership to nurture requisite political consensus. This policy needs to be supported by an advocacy program able to identify and support institutions and/or individuals that promote regional infrastructure development. It is crucial to be mindful of the complication and start with well-defined and properly funded projects whose implementation can be a catalyst for larger projects. Starting points could be the existing Pan-African objectives. For example, the Trans-African Highway (TAH) program has set at continental level norms for highways thus providing the framework for the development of regional component that will constitute the building blocks for cooperation.

3. **The Secretariat of the RECs can be an honest broker for sharing gains and resolving disputes.** From experience, facts based presentation and cost benefit analyses are more effective in identifying winners and losers. Furthermore, a focus on how benefits from regional infrastructure are shared is far more effective than attention to how resources are shared. This would require all stakeholders involved to think regionally even when considering national level actions. The present lack of appropriate mechanisms that would both help and put pressure on member states to implement regional decisions is a critical impediment to the effectiveness of RECs in WCA. This is especially true in the absence of bigger economies that can serve as a role model in this domain. The challenge going forward is to build into the rules making clauses and create incentives for compliance with regionally agreed decisions, as well as penalties for non-compliance. The Franc zone, an agency obtained by an external and credible partner is an example of an effective agency of restraint in WCA. Strengthening partnership between governments and the donor community particularly in the framework of investments in cross-border transport infrastructure would solve key issues in the sector. Such an approach further reinforces the need to nurture the requisite political consensus in the framework of transport corridors. Several successful case studies can be used as inspiration for such a process. Likewise, the automation of procedures at the Douala single window had dragged for years until a committee chaired by the
Secretary General of the Prime Minister’s office was created. Such examples will need to be documented and disseminated.

4. **A pragmatic approach in institutional design which prioritizes an incremental delineation of scope is needed to establish effective regional institutions.** From experience, becoming more effective is easier for agencies with a narrow set of tasks and responsibilities than for those with a broader design. Priority, particularly for weaker RECs, should be placed on regional sectorial technical bodies. Their scope can be expanded as capacity is developed and decision making is streamlined. The regional cooperation in infrastructure provision could proceed in five steps. First it is important to clarify and build consensus on the roles and responsibilities of regional bodies concerned with regional integration. Second adequate legal authority is required for regional entities to improve and accelerate decision-making processes. Third human resource both in quantity and quality is required. Fourth the regional infrastructure development strategies will succeed only if there is synergy with national development plans. Finally, delivery mechanisms for priority programs (for example, regional infrastructure) should be strengthened to underpin confidence in integration by delivering tangible results. Sequencing among these steps is essential. Unfortunately, Africa’s efforts to strengthen regional integration have focused on the fifth action. Where progress was achieved, efforts were rebalanced among the five institutional challenges. Best practices for such pragmatic approach include the experience of the corridor projects. Proposals for balancing these institutional challenges are considered below under the restructuring of the department in charge of transport of RECs.

5. **In conclusion, there is a need for a work program that rigorously documents the benefits that accrue from regional transport programs and advocates for their implementation.** Such a program should identify and empower individuals and institutions with credibility at the highest level in the public and private sector for regional transport programs. While an ambitious vision is needed, success is likely to materialize through an incremental approach, starting with some realistic projects, implement them to build confidence for more complicated actions.

6. The recommendations for enhancing the role of WCA RECs fall into three areas where RECs could be highly relevant: (i) improving intermodal efficiency, (ii) harmonizing transport regulations, standards and procedures and (iii) streamlining the transit traffic and border procedures.

3.2 **Improving Intermodal Efficiency Along the Transport Corridors**

1. **RECs should improve intermodal transport efficiency; this could be done by nurturing appropriate interface (nodes, dry ports, ICDs etc.) of various modes of transport in order to offer door-to-door competitive services.** Efficiency requires properly coordinated and integrated investment in basic infrastructure; this should also take into account non-transport agenda such as customs and border trade procedures. Intermodal transport efficiency also requires
improvement in the efficiency of transport services, particularly modern technology (ICT, ITS, etc.). One policy issue that needs to be addressed, is coordination among the various government agencies involved, including those responsible for licensing, investment, promotion of private-sector initiatives. Both government and the private sector need to work together to develop intermodal transport that not only provides access to inland and landlocked areas but also promotes environment friendly freight transport. Developing dry ports, an important component of intermodal transport, could play a major role in promoting intermodal transport. Dry ports located in deep inland areas, as opposed to near the sea, would incorporate customs and other related facilities and rail links, as well as provide transfer, transshipment, and distribution functions for cargo. Planning, developing, implementing and decision making entities should address the high risk of rent capture especially with private monopolies emerging through unregulated concessions. In Eastern and Southern Africa rent capture was avoided through the creation of a platform where logistics operators acted as dry ports. By encouraging a modal shift, such dry ports would help in easing road traffic congestion.

2. **The mandate of RECs in national multimodal investment programs and associated policy reform must be clarified.** Operational issues are best handled at the national level or through specialized agencies with the RECs focusing on strategic and coordination issues. The World Bank is currently supporting a Regional Development Policy Operation (RDPO) on the transport corridor between Abidjan and Ouagadougou comprising a series of policy actions implemented by the two countries (Cote d’Ivoire, Burkina Faso). The plan is intended to progressively expand to additional countries. In view of ensuring that actions undertaken are consistent with regional strategies, UEMOA and ECOWAS have been associated with the program from its inceptions. The SSATP Third Development Plan (DP3) (see Box 2) covers several elements. The SSATP could assist WCA RECs and member states develop an institutional framework which is both a conducive multimodal investment program, and enables the emergence of efficient logistics services.

3. **In conclusion, there is a need for RECs to develop their transport program as a comprehensive package for all transport and logistics,** including measures that would avoid rent-capture by designing appropriate regulatory frameworks for investors and operators. **Priority shall be placed on clarifying the role of RECs in the transport sector.** The sensible approach in WCA would be to incorporate core investment and operational issues in countries’ national programs and to empower RECs to provide the strategic framework for coordination, peer-pressure and monitoring.
Box 2: SSATP

The mission of the African Transport Policy Program (SSATP) is to facilitate policy development and related capacity building in the transport sector of Africa. Its third Development Plan (DP3 2014-2018) focuses on integration, connectivity, and cohesion. It has three objectives, (i) promote effective policy and strategy formulation as well as implement corridor development at country and regional levels; (ii) develop capacity among institutions such as RECs, countries, corridors, industry associations for inclusive policy dialogue on regional integration; and (iii) promote efficient logistics services.

The SSATP’s work entails knowledge creation through assessments and case studies, a dissemination of knowledge and best practices. They support knowledge application as well as a review both capacity building needs and capacity building support and advocacy. Their work also includes advocacy for coherent transport policies. This consists of adopting and implementing measures for improved road safety in compliance with the goals of the Decade of Action for Road Safety in Africa. SSATP’s activities are aligned with RECs and corridor management authorities work programs. Such an approach has positioned the SSATP over the years as an effective mechanism for supporting the transport aspects of the corridor development agenda for trade and regional integration.

The DP3 work program is overseen by the REC’s Transport Coordination Committee (REC TCC). The committee functions as a forum for exchanging experiences, fostering good practices and coordinating programs and activities. REC TCC consists of institutions involved in trade facilitation programs in Africa such as national transport agencies, corridor authorities, regional logistics industry organizations and development partners. WCA RECs can use the SSATP DP3 to support several recommendations of the Transport Guidelines. ECOWAS, ECCAS, UEMOA and CEMAC as well as corridor institutions are members of REC TCC.

3.3 Harmonizing and Enforcing Transport Regulations, Standards and Procedures

1. **WCA countries have made significant progress in adopting text for the harmonization of transport regulations, standards and procedures; but very little (if at all) has been done in terms of effective implementation.** Part of the non-implementation stems from the fact that some of these regulations and procedures are outdated, unrealistic or were poorly designed. RECs have never had adequate professional and legal expertise for undertaking effective regulatory reforms. Weak human resource compounds with weak institutions to yield an ad-hoc approach through which uncoordinated directives are issued without proper attention to their feasibility or implementation. In WCA trucking services are generally low quality and expensive, in comparison to other parts of Africa and the rest of the world. RECs need to support the modernization of the trucking industry. This should start with a study to revise the regulatory frameworks based on trucking surveys for the road transport industry, with a view to identify reforms that improves the quality of the policy. The regulatory frameworks, if properly implemented and enforced, can eliminate unjustified restrictive practices and increases both the quality of services and business practices. RECs should also organize systematic monitoring of road quality on both the main regional transport infrastructure network of roads and the regional corridors. It is critical that a regional review of institutional and financing arrangements for the maintenance of the regional road also be undertaken by RECs. The work program for this
harmonization could build from the World Bank road transport reform toolkit as well as from the regional Development Policy Operation (RDPO) between Cote d’Ivoire and Burkina Faso.

2. **In all WCA countries, the trucking industry is segmented between a large number of small informal operators with a few generally old trucks, and a small number of formal higher quality operators.** There is a need for a work program that professionalizes transport sector operations. This entails nurturing an effective synergy between domestic and international traffic as well as proper sequencing between the national and regional levels. In-depth sector studies based on reviews of the policy and regulatory environments as well as firm level surveys of users and providers in all countries, need to be an essential prerequisite undertaken. Other useful measures would include (i) studies on truck financing, (ii) reviews of foreign investment legislation to ensure that it is not unduly restrictive; and (iii) an extension of the work done by WAEMU and the Borderless Alliance to the entire ECOWAS region. A similar process driven by the SSATP should be initiated in Central Africa. Their built-in capacity makes them well placed to assist in this area.

3. **In conclusion, WCA RECs should build from their experiences and from best practices from other African regions to harmonize their transport regulations, standards and procedures.** Such measures will enable the region to adequately trade internationally and with other parts of Africa. WCA RECs should peer-pressure to ensure effective enforcement and lead the legal and regulatory reforms needed to attract investment in regional transport. Finally, RECs need to create an incentive for the professionalization of the transport logistics business with a clear division of responsibility between the regional and national authorities as well as code of conduct for private operators. To ensure success a compendium of modern streamlined transport regulations, standards and procedures will need to be prepared. In the process outdated or poorly developed regulations will be updated and harmonized.

### 3.4 Facilitate transit traffic and border procedures

1. **A 2015 transit review undertaken for the African Development identified areas that should be prioritized in facilitating transit traffic and border procedures in UEMOA.** Their results, mirrored similar impediments identified more than a decade ago in the ECCAS region. Overall stakeholders are frustrated by excessively high costs and long transit times at border crossing point. Resources should be oriented towards building confidence through access to information. Transport and customs administrations can play a lead role in ensuring this information is available. At the gateway ports, an adequate guarantee system is needed to ensure transit goods are not dumped in the coastal country. Currently the cargo tracking system initiated by either national chambers of commerce or customs administrations of coastal countries are disabled and not operational once the land-borders are crossed. Processing by landlocked countries does not start until the cargo reaches the border partly because various customs offices are not interconnected. Presently, there is a need for real-time communication among customs
administrations. One Stop Border Posts have not expedited cross-border transactions and in some cases have added other cost raising layers. This inefficient transit has generated profitable opportunities for a few powerful and well organized operators who may seek to maintain the status-quo. The solutions to this issues needs to be grounded on two main themes, improving land-border crossing procedures and fostering customs interconnectivity. The recommendations for implementing these themes are outlined below.

3.4.1 Land-Border Crossing

2. Land-border crossing issues need to be addresses through a coordinated and integrated approach consisting of a One-Stop Border Posts (OSBP) through which procedures and processes for cross-border movement of goods, services and people are undertaken once. Although the operational aspects of the construction and operation of OSBP rest with relevant departments in national governments or specialized agencies, the key roles and responsibilities for RECs are as follows (OSBP sourcebook 2016).

3. Effective border crossing should be covered by sound policies on each side of the border and since most transit traffics go through more than two countries such policies should be harmonized under the aegis of the RECs. RECs will need to develop for each of the two sub-regions, a framework for dealing with territorial jurisdictions and streamlining and harmonizing approaches to concession. This will have to be supported by a legal and institutional framework that governs the operations of border agencies. In cases where the legal and institutional framework has not been established, a REC transport facilitation sectorial committee should be created with the following functions: (a) designing a comprehensive transport facilitation implementation plan, (b) monitoring the plan’s implementation, (c) gathering relevant feedback and information from member countries of the REC on its own initiative, and (d) providing recommendations to the REC policy/legislative/regulatory body for (amendment) action. This policy will need data exchange protocols through the latest ICT technology. Data exchange protocol will need to be complemented by a framework for coordinating adequate protections of the rights of relevant investors in hard infrastructure such as offices for border officials, operational equipment, warehouses, and parking.

4. The investment requirements for the construction and operation of the OSBP should be undertaken as part of infrastructure development plans at the national level. RECs should help clarify the model under which the OSBP will be constructed and managed. One possibility is to locate the OSBP in one country to accommodate officers from both countries to carry out border controls. The REC will be instrumental in building and securing trust and cooperation between countries. Under this model, one country will need the authority to carry out controls in the host country. The host country will need a legal framework that allows foreign officers to work on their soil. While this can be achieved bilaterally, RECs can act as observers. The Cinkansé border post --- despite failures on several aspect--- which serves the Togolese and Burkinabe border is an example of this arrangement. While, the border is constructed on
Burkinabe territory, the UEMOA has been given the land such that transactions are undertaken under UEMOA jurisdiction. Likewise, the Mfum at the border of Nigeria and Cameroon is located in Nigeria. The program is expected to help increase trade and strengthen cooperation between countries of ECCAS and those of ECOWAS. More specifically, the program seeks to improve the efficiency of the logistical chain of transport along the Bamenda-Enugu corridor, as well as the living environment of populations in the program area. Currently, most trucks do not cross this border, meaning that goods are transshipped into customs warehouses. The procedures were prepared for manual processing, while seeking to incorporate electronic clearance in anticipation of the day both countries at Ekok/Mfum introduced connectivity and electronic processing, specifically for transit traffic.

5. **To sustain the effectiveness of OSBP, there is a need for a consistent program that builds consensus among actors and monitors and mediates in cases of dispute.** The process should include proper user feedback that provides early warning of issues that need to be addressed to ensure seamless traffic flow through the OSBP. The REC should use the information from user’s feedback survey reports to mobilize the relevant stakeholders that might be responsible for cross-border delays or other cost-raising acts. This process should also include empowering a coalition of change agents that will help overcome inertia and vested interest that are reluctant to support an operationalization of OSBP. An aspect of the project could include integrating OSBP in the training programs of those professional bodies represented at the land border crossing points. Overall, these actions would help ensure that all aspects of OSBP’s implementation proceed in an integrated manner that incorporates administrative staffing, adequate equipment as well as the necessary procedures to enable smooth and defined border control operations. It is also essential not to prioritize physical facilities at the cost of introducing adequate processes and procedures. The first UEMOA OSBP at Cinkansé largely failed as a result of such disputes. The question of who manages all aspects of implementation need to be resolved by the time the construction work is completed. Equally important, the party responsible for managing the JBP after it becomes operational needs to be determined. Currently, there is no agency taking on this function. Each operates independently. At Cinkansé, the concessionaire provides facility management and maintenance, but does not address the issue of border control agency coordination.

6. **The REC should also ensure compliance with multilateral instruments that promote the single-stop border clearance procedure.** Article 8 of the WTO Trade Facilitation Agreement (TFA) places an obligation on member states to cooperate with one another and coordinate their activities to facilitate trade. The OSBP is identified as one instrument for such cooperation and coordination. Similarly, the World Customs Organization (WCO) recommends countries cooperate with neighbors to establish OSBP and facilitate controls.

### 3.4.2 Modern Transit Regime

7. **The effectiveness of the White Paper recommendations rests on modern transit regime that eliminate the incentive for dumping transit goods into local markets without payment of**
relevant duties and taxes. Generally, the function of a customs administrations is to ensure from
the time bonds are paid and cargo is sealed at gateway ports, that no tampering occurs until
destination. This require timely and reliable exchange of information between transit points on
the corridors. Interconnection among these administrations is therefore essential. The ISRT has
been relatively successful in tracking the documentations and the means of transport, but there
has been only timid achievement with respect to the tracking of the physical cargo. Corrupt
traders continue to collude with customs, leading police and gendarmerie officials to dump transit
goods sometimes at the port city. A desirable system enables monitoring of the transit cargo on
the entire corridor, provides accurate and instantaneous cargo location as well as provide a
guarantee of its integrity. Other preconditions for such a system include: electrification of border
points, 24/7 customs presence, as well as security and telecommunications facility.

8. There are two main issues in the area of transit that are ripe for regional leadership: (i)
weaknesses in both the Inter State Road Transit ISRT Convention and its implementation;
and (ii) the numerous transit fees levied by various countries. On the first point, the ECOWAS
Commission is currently preparing a revised ISRT Convention, which will effectively put in place
an ECOWAS wide transit regime based on a single payment of the guarantee issued in the first
country transited (as is currently being put in place between Côte d’Ivoire and Burkina Faso).
This will include an automated Regional Guarantee System in which the system of logbooks is
replaced by electronic declarations. ECCAS should do the same in Central Africa. With respect
to transit fees, RECs can oversee the review of the level of transit fees to ensure that they are
made compatible with the undertakings of Article VIII of the 1994 GATT Agreement. In West
Africa ECOWAS should engage in a dialogue with neighboring WAEMU countries such as
Benin on similar fees they apply on transit cargo to and from WAMZ countries. WCA RECs
should review the implementation of the Inter State Road Transit(ISRT) Convention and advocate
for its seamless implementation. A priority shall be the adoption of a single regional transit fee
schedule.

9. In WCA most containers are de-stuffed at the border, partly because customs officials are
often unaware of the nature of the goods being transported. The WCA Guidelines have
established a Multi-Country Performance Monitoring Systems (PMS) to follow cargo
movements. This paper will only focus on the role of the RECs in improving this procedure.
There is a need for an accurate database on transit trucks and trailers, as well as a clear distinction
between domestic and regional traffic. RECs should promote the development and maintenance
of such database as well as a system for discerning domestic from transit trade. This database will
be supported by full implementation of the transit modules of the respective customs
administration systems. One solution that has been adopted by national customs administration -
-- most of the times from coastal countries-- is a geo-localization of cargo using a tracking system.
A regional tracking system, detailed in the PMS, could follow one of the following two options.
First option is to rely on data collected at locations on the transit route. This process depends on
adequate, timely and available data on one hand but also the willingness of these authorities to
confront highly sensitive issues. Data collection and analysis needs to be agreed upon and enforced by all participating stakeholders. Under this option, the RECs should facilitate dialogue among national custom-authorities, land as well as maritime transport and ports authorities to determine who should take the lead (refer to case of Douala originated corridors). The second option would entail a GPS-based, GPRS-based, RFID-based Tracking systems. This option would require a GPS module and a transmitter be placed on each vehicle transporting a cargo along the corridor. Furthermore, data needs to be captured and transmitted to a control center during the entire journey. In this case instead of GPS being placed on the vehicle, a Radio Frequency masts or data readers will be placed along the corridor; although it worth pointing out that the UEMOA RFID tag has too many features for proper tracking and as such it might better to abandon this system all together. The WCA case is specific. In the region most of the transport corridors are situated in the transit countries. For example, the Douala-Ndjamena corridor is over 95% on the Cameroonian territory and as such the main loser from customs duties and taxes evasion is Cameroon. As a result, transit countries have granted concessions to private operators of tracking systems and this has disproportionately raised the cost for landlocked countries’ traders. WCA REC could prioritize system inter-operability such as was done in Kenya where several providers are licensed and subjected to clear technical specifications. This provides a better alternative to the current attempt at developing regional cargo tracking systems which has been strongly resisted by coastal countries. However, it is crucial to properly account for the political economy of the context under consideration. As indicated above, the core operational issues will be handled at the national level and covered under road transport services (Action 7.3) of the Guidelines. RECs should develop and advocate a framework for inter-operability of national cargo tracking systems. This framework should be complemented by a transparent process for licensing and monitoring private cargo tracking operators.

10. The TRIE enables business predictability and improves flows across borders, it reduces the financial obligations and waiting times associated with these barriers. RECs are best placed to advocate for modern professional standards in the transport sector. RECs are also best placed to ensure safety improvement as well as reduce road traffic fatalities. REC should take the lead in establishing High Level Groups that gather policy makers and information from the private sector to identify the key issues in public transport and urban mobility, and culminates in a set of policy recommendations aimed at tackling the main challenges. (refer to Dakar 2013 Forum - What was said?). However, without the implementation of a strong road transport association TRIE could lead to rent-capture; and this has been the case in WCA. In turn successful implementation of TRIE occurs where there is strong road transport association. WCA RECs should advocate for the development of strong road transport association to ensure implementation of the TRIE as a key trade facilitation tool.

11. Harmonized standards and traffic rights for vehicles and drivers is essential for effective transit. This can be done through the harmonization of transport systems by promoting the development of regional standards for truck. A case studies that could be of interest to WCA is
the experience of the Federation of Eastern and Southern Africa Road Transport Association (FESARTA see box 3) particularly in establishing and monitoring an accreditation system. This measure needs to be supported by partnership with IRU on the road transport training of drivers and transport operators as well as standards for roads safety. WCA RECs should also play a lead role in facilitating the cross-border movement of vehicles and drivers.

Box 3: FESARTA

The Federation of Eastern and Southern Africa road transport association (FESARTA) is an apex organization of National Road Transport (NRTAs) in 16 countries in Eastern and Southern Africa (Angola, Botswana, Burundi, DRC, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South African, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe). The FESARTA seeks to achieve wide recognition of the value of the road transport industry in East and Southern Africa and enhance its efficiency and competitiveness through the National Road Transport. FESARTA is actively committed to supporting the associations of the NRTAs, build the capacity of less-developed associations and encourage the formation of associations in countries where none exists. Their membership is comprised primarily of private transport companies. The association sources and maintains relevant information on problems faced by road transporters along corridors in East and Southern Africa. FESARTA works through the RECs and other regional and national structures to resolve these problems.

The Road Transport Corridor Handbook is an important output of FESARTA. The handbook is produced annually and disseminated to members as well as interested stakeholders. The Road Transport Forum is used as a means of disseminating the handbook and has emerged as an important platform for both peer-pressure and resolution of leading impediments faced by road transporters. In cooperation with national chapters, FESARTA participates in road safety projects which include driver training, driver health, hijacking prevention, establishing truck stops/wellness centers and preventing and containing the spread of HIV/AIDS and other communicable diseases. Through the NRTA, FESARTA participates in self-regulated projects which encourage consignees, road transporters and consignors to professionally manage their operations. Through its efforts, FESARTA helps promote legislative measures and policies that can improve the efficiency of regional road transport services. The federation provides less confrontational channels through which actors are encouraged to settle road transport related disputes. As of June 30, 2016, 70 of the NTBs identified as impediments to transport of goods and services, 36 are still active, 20 have been resolved and 14 completely removed. The website also features numerous useful information for road transporters and other stakeholders in the transport corridor of the ESA region. (See http://www.fesarta.org/)

FESARTA has endorsed Transport World Africa (TWA), a publication to support and promote the road, rail, sea and air transport industries. It enables knowledge sharing of supply chain solutions, from producer to consumer. As such, the publication is a channel for reaching the 260 million people in the SADC/COMESA/EAC regions, and for the promotion of intraregional trade as a key driver behind southern and east Africa’s common objectives – to create jobs and eradicate poverty. Transport World Africa covers complete transport and logistics management solutions, as well as the movement of freight throughout Africa. TWA carries in-depth features on fleet management, commercial vehicles, freight and forwarding, supply chain and logistics, risk and insurance and transport projects.
4 Organizational Restructuring and Human Resource Requirement

1. The organizational restructuring of WCA RECs transport departments should be considered in relation to a new mandate consisting of three subject areas. First RECs should be empowered to promote full implementation of trade facilitation measures along the corridors (including ports and border posts). This includes the harmonization of policies, standards; compliance with international conventions; and participation of the private sector. Secondly RECs should promote effective planning of multimodal transport which would entail selecting the most effective transport modes. The ultimate goal being the integration of more than one mode to create better, efficient, and cost effective transport services. Thirdly RECs are expected to support transport management and operation by bringing forward measures that harmonize: i) the conditions of entry in the transport sector, in terms of human capacity, qualifications and competence of transport companies; ii) regulations to manage and operate transport companies and to operate transport fleet (trucks, buses, locomotives, ships, and aircrafts); iii) axle load standards, and overload control. The transport department shall provide strategic support to transport corridors, transport development in all modes (road freight, railway, air maritime, and inland waterways). Together with other relevant departments (e.g. customs union and common market), the WCA REC transport departments should support a comprehensive and holistic trade facilitation agenda. The mission of the transport department is to facilitate, through strategic expertise, the provision of adequate, integrated and cost-efficient infrastructure and related services to support regional integration and poverty eradication. The transport department will then be in the position to improve services, create a conducive environment for public and private sector investors. Such a holistic approach is necessary to significantly reduce the costs of doing business.

2. The restructuring efforts should strive to be dynamic in structure so as to facilitate the emergence of other agencies, including corridor management institutions, professional associations. The Head of the transport Department can be a Commissioner who is appointed by the political allocation of staffing position in regional organizations. It is essential that all other staff be hired based on competence. The department will most likely cover a broader infrastructure portfolio. Alternatively, elements of the hard and soft transport development might be included in the mission statement of other departments; for example, customs issues can be situated in a different department. It is therefore important that the restructuring of the transport department takes into account the broad organogram of the REC Secretariat on one hand and parallel structures on another hand.

3. An example is given with the TMEA in East Africa that brings together all major donors, all national governments, the EAC Secretariat, the private sector and civil society. TMEA is also well funded which enables simultaneous focus on the investment and support of the necessary transport facilitation reforms. While the TMEA does support regional integration like the EAC, it is shielded from political considerations. This characteristic of the organization
possibility enabled support to the decision in October 2013 by the Presidents of Kenya, Uganda and Rwanda to implement a Single Customs Territory (SCT) between them as members of the East African Community. This unilateral decision came after several attempts over the years to move the process forward under the framework of the whole ECA. In one day the TMEA was able to remove multiple weighbridges and police and customs checks along the Mombasa-Kampala-Kigali route. The TMEA introduced computerized clearance, electronic tracking and other innovations that have overturned the main Non-Tariff Barriers (NTBs) that plagued trade along the Northern Corridor. The TMEA used its extensive studies on the NTBs along the WCA corridors to convince Head of State from the region to take a bold decision on the SCT. This decision has had positive spillover effect on the rest of the Community. On November 2013, Burundi and Tanzania decided to implement similar reforms.

**Box 4: TradeMark East Africa (TMEA)**

TMEA supports the trade and regional integration agenda of the East African Community. At the regional level, TMEA supports regular high-level dialogue through stakeholder forums and the Arusha roundtable meeting series. TMEA has national representation that supports the Ministries of East African Cooperation (MEAC) by empowering it to lead national coordination and regional integration policy making and implementation. The private sector is supported through research and advocacy that aims to eliminate the impediments of doing business in the region. TMEA empowers civil society through regional policy dialogue platforms on issues affecting trade and growth.

TMEA’s work program is structured around 3 pillars: access to markets, enhanced trade and improved business operations. In an effort to foster further market access, TMEA focuses on addressing key drivers of high trade cost. This includes congestion and delay related issues such as outdated infrastructure. Actions are directed at improving transport infrastructure efficiency. TMEA seeks to address drivers such as delay propelled by low labor productivity, bureaucratic inefficiency, poor transport regulation, and corruption. Reducing such delays in turn reduces the cost of transport, increases physical access of goods to markets, and stimulate trade. Their activities include both investment in hard infrastructure (such as OSBP construction) and trade facilitation measures.

The TMEA supports activities enhancing the trade environment. This includes negotiating more favorable trade agreements, improving common regional trade policymaking and implementation by the EAC, reducing non-tariff barriers to trade, and efficient trade facilitation. TMEA has been particularly successful in supporting harmonized policies, legislation and procedures utilized throughout the region. The overarching objective has been to ensure custom unions are implemented as a precondition for the actualization of the common market and other protocols. Furthermore, attention is paid to two key pre-condition for success: (i) sufficient demand by partner state parliaments, public sector, private sector and civil society organizations for the regional economic community agenda to be driven forward; and (ii) prioritization of regional trade policies over national trade policies and priorities by partner states.

Improved business competitiveness is achieved through streamlined business regulations for trade, improved export capability and efficient trade logistics services. This work program includes a firm level engagement with private sector actors seeking to improve the performance in public-sector dominated bodies as well as help businesses influence reforms in the public sector. Through their activities, the TMEA significantly contributes to overall poverty reduction in the region by targeting sectors with the highest level of poverty and the most binding reforms to the SMEs TMEA. Addressing softer side issues like standards and NTBs, IBC directly complements TradeMark East Africa (TMEA)’s work on physical infrastructure (customs, border posts etc.) and provides advocacy opportunities for the private sector and civil society across the breadth of the Theory of Change.

The TMEA has been recognized by the United Economic Commission for Africa, the African Union Commission and the African Development Bank in their April 2016 African Regional Integration Index as instrumental in making the EAC the premier African region.
4. **The public sector and private sector operators need to engage in a dynamic trade and transport dialogue that identifies constraints and potential interventions at the national or regional level.** The transport departments of WCA have no more than three staff, including a Commissioner. National consultations on transport facilitation are not always very well organized nor are they regular. They do not function at the same level nor do they obtain the same results in all countries. Consequently, there is a need to review the existing programs at the regional and national level, in public and private sector in view of delineating a role for the RECs. WCA REC should audit National Trade Facilitation Committees to determine their status, delineate their activities and identify issues encountered that prevent them from fully playing their role. REC’s need to encourage and draw from common experiences establishing and operating public-private dialogue bodies. The lack of access to information, insufficient advocacy and irregular dialogue on trade and transport facilitation contribute to undermining integration in WCA. RECs should help National Facilitation Committees produce national transport guides similar to those already existing in the WAEMU countries and Ghana as well as undertake other advocacy activities. The information center from the Abidjan-Lagos Corridor (ALCO) should also be consolidated into an ECOWAS-wide program. A similar endeavor will be useful for Central Africa. Overall, there is a need for the transport department of WCA RECs to develop the framework for creating and sustaining National Transport Facilitation Committees. They shall create a regional platform for experience sharing and monitoring. The SSATP REC coordination committee could help spearhead these regional committees.

5. **For private sector advocacy on transport facilitation, the Borderless Alliance has proved since its creation in 2011 to be a valuable champion for trade facilitation in West Africa.** The Alliance needs to be extended to other corridors in WCA. This independent and private-sector led advocacy and dialogue platform has established national committees in eight ECOWAS countries, including Ghana and Nigeria for WAMZ. Its members are leading producers, traders, transporters and financiers, as well as ports, chambers of commerce, regional institutions and donors. Activities of the Alliance have included various awareness and advocacy campaigns, the implementations of Border Information Centers, publications on trade rules and procedures at borders, etc. RECs should establish a regional mechanism for the private sector to report and publish barriers to trade, as was developed at the level of the Tripartite between the COMESA, EAC and SADC. These complaints could then be addressed by policymakers during regional forums, as done by the EAC with “Regional Forums on Non-Tariff Barriers (RFNTB)”. The REC should advocate for a platform for private sector operators in the transport sector. Such a platform could build from the experience of Borderless Alliance and the EAC RFNTB.

6. **There is now a consensus for the development of hard transport infrastructure to be undertaken simultaneously with complementary policy reform necessary for competitive transport logistics services.** To that effect, consensus building should be prioritized in
conjunction with building and sustaining a coalition made-up of governments, regional economic communities, private sectors and civil society stakeholders of hard and soft infrastructure provision. In the WCA region these transport stakeholders are not sufficiently organized to articulate their views and interests. A framework is needed for networking, peer-to-peer learning, and experience sharing.

7. **A Platform to Support Coordinated Infrastructure and Transport Logistics Policy Reform could be considered.** Such a platform would be an extension of the Trade Facilitation Weeks (TFW) convened in 2013 and 2014 to discuss the framework of the corridor project linking Douala in Cameroon to Ndjamena and Bangui. Such a platform will enable countries wishing to maximize the development impact of transport development, access to i) the best information on the rules and regulations affecting transport provision, as well as logistical services and their impact on transport costs, trade and investment; ii) appropriate trade design, regulatory reforms and the capacity for effective implementation; iii) the projected outcomes of specific reforms, including overall winners and losers; and, iv) policy options for addressing adverse distributional consequences. This will be an iterative process that will require considerable discussion and coordination among stakeholders to ensure that each party addresses the trade facilitation impediments that results from its actions. To ensure success, a Framework Agreement that identifies the specific actions necessary to boost trade will need to be developed. For this to succeed, resources should be available for convening regular meetings of high level policy makers to identify priority impediment, benchmarks and timelines for addressing them.

8. **One ingredient for the success of the TFW was the incremental process that was followed, starting with bilateral dialogue between the customs administrations of Cameroon, Chad and CAR respectively.** This process was subsequently extended to other stakeholders in the transport sector followed by a corridor wide session convened by CEMAC which served as a facilitator. This process should be extended to other corridors in WCA. The World Bank and other donors provided on-demand support through the entire process. The TFW was a unique experience that permitted actors to have frank and open dialogue between regional countries and facilitated the development of a consistent action plan on trade facilitation agenda in Central Africa. The 2014 session recommended institutionalizing the TFW as a framework for promoting regional dialogue, with the possibility of serving as a building block towards the creation of a Douala corridor management authority. The African Development Bank is considering emulating this process in West Africa. WCA should take advantage of this opportunity. WCA can spearhead the creation and serve as focal point for a regional platform to support a coordinated infrastructure and transport logistics policy reforms. Such a platform could be spearheaded as an extension of the Trade Facilitation Weeks (TFW).The new structure of WCA RECs should have a Head of the transport department supported by three divisions staffed with competitively hired professionals: One division would focus on regional transport planning and multimodal transport planning, the second on transport facilitation
policy and the third on road freight. A framework will need to be created that coordinates the transport portfolio with other relevant departments. This could include departments in charge of customs, trade, agriculture, and private sector development. The issue is that transport and trade issues are addressed under two separate offices the commissioner of Trade; Customs, Industry and Free movements and the office of the Commissioner of Infrastructure which includes the department of Transport and Telecommunications. There will be a need to nurture effective synergy between these two departments to improve efficiency of the cross-border transport corridor agenda.

9. **Another example on interest is the UEMOA a regional trade facilitation program (Programme Regional de Facilitation des Echanges (PRFE)) that was overseen by a multi-sector trade facilitation project.** These departments should be complemented by adequate partnerships with donor agencies and relevant departments at the national level. The mandate of the above three divisions could cover the following:

a. The Division of Regional Transport Planning. This division will have as a mission statement to provide an integrated multi-modal transport for better, efficient, and cost effective transport services. More specifically it will be in charge of

   i. Improving intermodal efficiency along the transport corridors
   ii. Promoting public and private investment in regional transport infrastructure;
   iii. Coordinating and promoting integrated multimodal transport for regional integration and development;
   iv. Building capacity for regional transport planning and management;
   v. Establishing common operational rules for transport infrastructure.

b. The Division of Transport Facilitation. this division will be charged with addressing trade facilitation measures and strengthening the sub-regional legal framework. Its core duties will be to:

   i. Develop, promote and monitor the implementation of regional protocols, policies and strategies;
   ii. Build capacity training, and promote inclusive stakeholder participation;
   iii. Develop and enforce transit traffic and border procedures;
   iv. Harmonize and enforce transport Regulations, standards and procedures;
   v. Promote road safety and clean transport;
   vi. Develop policy procedures for cross border cooperation.
c. The Division of Road Freight, will monitor the road freight industry, freight forwarders & multimodal operators. It will use as a guideline terms of access to the trucking profession, standards, regulations and enforcement. Its core duties will be to:

i. Develop, enforce and promote harmonized road freight transport regulations, standards and procedures

ii. Build Capacity building and training programs for freight forwarders and multimodal operator that can enhance regional integration

iii. Develop and monitor a legal and regulatory framework that aims to nurture a regional transport association

iv. Develop measures to harmonize entry conditions in the transport sector, in terms of human capacity, qualifications and competence of transport companies

v. Develop regulations that manage and govern the operations of transport companies as well as control transport fleet operations (trucks, buses, locomotives, ships, and aircrafts);

vi. Develop and enforce axle load standards, and overload control.

5 Review of the Decision Making Process

1. For effective implementation of the recommendations of the Transport White Paper, there is a need to revisit the decision-making process and streamline the role of REC and other stakeholders as follows:

i. Regional programs should be identified through a bottom-up approach, that starts at the national level, and is allocated to the RECs only when regional coordination or cooperation is needed. Any process at the regional level should build from and be aligned to national decision making; likewise, member states should incorporate regional factors in designing and implementing transport projects. Overall, countries should think regional and act national. Regional actions should only be considered where a valid case has been made that there will be insufficient provision at the national level.

ii. A proper interface needs to be established between the decision-making of each REC and the continental agenda. The Department of Transport at the AUC should have direct relationship with its counterparts in REC Commissions. This relationship needs to be clarified through division of labor following a guideline outlined between member States and the RECs. The interface between ECOWAS and ECCAS needs to be strengthened in view of facilitating the consolidation of a CFTA negotiating block along the same line as the Tripartite FTA.
iii. **Transport projects require large investments that are primarily financed through loans.** Financing instruments for such loans are primarily available at the national level. Lending by the development banks (AfDB, World Bank) for regional transport projects is constrained by difficulties securing agreements between countries and complexities obtaining appropriate guarantees for multi-country loans. Loans can only be made to revenue earning, creditworthy regional entities, unless repayment obligations are assumed by member governments. Even when this possibility exists at the regional level the WCA REC are not sufficiently strong to qualify for borrowing and/or managing the associated operations. The role of RECs on RECs in actual design and implementation of projects should be kept to the minimum; past practices of RECs engaging in procurement for big investments (e.g. of OSBP) have failed in WCA and should be abandoned. RECs should focus on creating the necessary conditions for efficiently providing infrastructure investment for regional transport, service regulation for logistics, and monitoring services. Priority should be given to the creation of a platform to facilitate dialogue between national governments, donors, regional and international investors. Regional development banks will either need to be strengthened or a framework for pooling fund for transformative transport projects will need to be created. The transport departments of RECs and at the AUC should lobby for increased allocation of IDA funding to regional transport infrastructure.

iv. **An effective synergy between the continental, regional and national transport programs can be built by shifting away from the usual ad-hoc approach through which decisions are made and the RECs are given responsibilities they cannot implement.** The continental, regional and national transport programs should be empowered to take advantage of opportunities to act as an informal broker and implementer of regional transport decisions. The RECs should be empowered to discharge of their responsibilities. Such empowerment should consist of member states abandoning subject areas that they have defined as requiring regional enforsecibility. Despite the transformation of Regional Secretariats into Regional Commissions, WCA member states have kept most of the powers that should be delegated to the REC Commissions. The empowerment shall also entail ensuring adequate staffing and funding is allocated to enable the Commissions to properly steer the process. The decision-making process should be flexible enough to incorporate a practical variable geometry through which actions are pulled and/or coordinated with ‘willing’ or ‘reformist’ states. This could build from the existing process included in current transport corridor projects.

v. The approach should also be inclusive for all stakeholders. There is a need for a framework to mobilize regional and international investors, as well as the broad civil society such that they can complement and/or support the national governments and the RECs. The inclusion of these stakeholders should also entail adequate capacity enhancement to enable them to play an effective role.
2. **Platform - Building from the experience of the Trade Facilitation Weeks (TFW), the transport departments of WCA RECs Commissions should support coordinated infrastructure and transport logistics policy reform platforms.** Such platforms would serve as an effective coordinating mechanism for programs and policies at the national, corridor, and regional levels. The platform would help better organize and empower pro-reform stakeholders to overcome vested interests as well as should complement the transport Departments of RECs.

The platforms could enable the following:

a. **Promote evidence-informed decision:** A strategic approach to transport infrastructure and logistics service can be achieved through generating and disseminating tested cutting-edge knowledge: This will entail the following

   (i) Collecting, aggregating and disseminating information. Adequate data is a precondition for sound policy making and implementation. Currently WCA countries, transport project managers, and donors do not have adequate information to support their actions. The platform will aim to solve this problem by developing and maintaining a depository of trade and logistics related information. The platform will collect information on rules and regulations affecting provision of transport in the region, as well as logistical services and their impact on transport costs, trade and investment. The platform will document best practices for the design of trade and regulatory reforms, capacity requirements for effective implementation and the probable outcomes of specific reforms. This will include overall benefits, identify potential winners and losers as well as generate policy options to address any adverse distributional consequences. All African RECs should compile similar information as this will help better understand best practices and failed experiences in other regions.

   (ii) Facilitating and identifying priority issues for research. Transport project design and management in Africa is often constrained by inadequate analysis that often does not properly address the problem under consideration. There are, often numerous reports prepared that satisfy the intellectual curiosity of the authors or that satisfy the interests of particular donors however does not resolve the problem at hand. When reports are commissioned by a project manager, this is done in haste, without proper vetting of the terms of reference or the results emanating from such research. As a result, there are numerous reports that are of little value. The situation in WCA, particularly in Central Africa, is even more problematic. The WCA countries are the least studied on the continent and consequently have little supply-driven research. A platform that fosters knowledge dissemination would help develop demand-driven policy research that takes into account the concerns of all stakeholders, including final users of services. It would also serve as a framework for agenda setting and validation of research and analysis. Such a platform will provide a framework for peer-reviewing and validating recommendations.
from various and numerous sources; it would also collate report studies and best practices compendium.

b. **Stakeholders empowerment and consensus building.** Persons and institutions involved in trade facilitation lack sufficient knowledge and lessons from previous experience either in their own country, region, or internationally. The platform would provide a framework for stakeholders to debate, cross-fertilize ideas and to better understand the consequences of their mode of operation and that of other stakeholders involved in trade. Ultimately, the platform will enable increased capacity through peer-to-peer learning among government officials, business and civil society. The Platform’s possible activities could include the following:

   (i) **Cross-sectoral peer-to-peer learning events:** presentations that provide relevant background on various topics and the synergies that need to be created to address the systemic impediments to transport logistics. Most stakeholders have a good understanding of some technical aspects of transport sector. Often what is needed is an understanding of how the various pieces come together in the particular context under consideration. Programs that address this help the various stakeholders understand how their work is related to and dependent on that of others.

   (ii) **Empower stakeholder groups that are able to drive reform actions through peer-pressure and accountability:** Trade facilitation brings together several stakeholders, institutions, vested interests in an environment characterized by uninformed stakeholders. This partly justifies the implementation deficit of regional decisions. This issue can be resolved through analyzing various stakeholders with attention to their interests, as well as their incentives for supporting or ignoring potential reforms. Institutional analysis shall be an essential part of the work program of the platform. This analysis will help identify concrete options for reform aimed at improving efficiency that are doable and affordable. A key feature of the work will be to ensure that diagnostic is translated into actions. Toward this end there will be a need to identify and adequately empower person(s) or stakeholders’ groups that are able and ready to champions those actions.

c. **Transport Actions Plan** Building from the lessons of the Trade Facilitation Week, the plan would develop a Framework Agreement that identifies the specific actions that should be undertaken to support regional transport agenda. Although the TFW enables some progress on the transport programs that could not be obtained under the formal structure of the REC, the implementation records of the recommendations outlined through the platform can be improved by outlining specific actions that need to be taken. Members of the Asia Pacific Economic Cooperation (APEC) used a similar approach to improve their trade facilitation performances. For example, in 2001 they committed to reduce trade costs by 5% in five years, and the first plan (2001-2006) was so successful that this process has been repeated. Those plans used a broad definition of trade facilitation and hence required the mobilization of a broad range of stakeholders.
6 Financial Issues

1 The REC’s expanded role in the transport sector calls for significant increases in the funding to support regional transport. WCA RECs are not revenue earning and most member States face stringent budget constraints; as a result, a significant share of their budget is donor funded. Lack of grant resources has a significant impact on programs development particularly for regional transport projects. A Lack of funding to undertake upstream analysis results in projects uninformed by research and analysis. Grant funding is needed to identify mutually beneficial projects that require cross-country cooperation and regional coordination.

2 Regional infrastructure projects must include a management function that is assigned responsibility for implementation and operation. Even if burden-sharing for the needed investments in hardware can be agreed among the countries involved, countries are often reluctant to borrow to finance the management function and to meet related capacity building requirements. A regional project may generate investment obligations that are disproportionately located in one country, most of the time the economically more advanced country. In such a case there is little incentive for the lesser developed country with limited borrowing capacity to mobilize its share of the financing of the regional project. At the same time benefits subsequently might accrue disproportionately to the more developed countries.

3 Some development institutions are increasingly developing grant funding instruments but this needs to be fine-tuned and expanded. IDA is now allocating some funding for regional projects but this allocation does not include grant funding for regional projects. The project additionally places constraints on using credits to directly support nonrevenue earning regional implementing bodies. Both IDA and EDF allow for regional projects as long as 2/3 are contributed by national envelopes. The national contribution ensures ownership in the regional projects, while recognizing the need for additional incentives to address the externalities affecting regional cooperation. Unfortunately, the funding arrangement can be jeopardized when a member country is unable to mobilize its share of the investment.

4 Funds from public and private sources should be mobilized and eventually pooled in a single basket to greater leverage capital and diversification risk, remove country-specific underwriting constraints, and encourage greater private equity participation. While private investment will often be an important source of funding for large scale regional infrastructure, private investors often will want to co-finance regional projects. Development banks often finance regional projects through a series of linked national credits or loans, with complex cross-linkages and coordinated requirements. This requirement makes co-financing of regional projects by private investors relatively unattractive, as they must establish relationships with the co-
investing governments. Private investors may perceive the fragmented structure as lessening their ability to effect commercial remedies if such becomes necessary.

5 The REC Commission should work with member governments to develop a regional transport program and act as a coordinating device to obtain funding for priority projects from the various existing sources of funding. National governments should empower Commissions to coordinate and provide needed analytical support. Donors should commit to funding the priority areas identified by governments for regional cooperation. The Fund should be a holistic instrument, with a dedicated window for infrastructural development. Such a Fund was included in the 1975 ECOWAS Treaty, as the regional financial institution responsible for addressing the infrastructural and compensation needs of members negatively affected by the integration process. Unfortunately, the Fund failed to raise enough monies and was transformed into a regional Holding Company—the ECOWAS Bank for Investment and Development (EBID) – in 1999. EBID has two subsidiaries the ECOWAS Regional Development Fund (ERDF) for public sector financing and the ECOWAS Regional Investment Bank (ERIB) for private sector financing. The community levy is the major source of financing for projects. Its taxable base is the taxable value of goods originating from third countries imported into the Community and released for home consumption. The UEMOA established a Regional Integration Support Fund (RISF) in 1998 to finance economic and social infrastructure. This included transposition and compensation for members negatively affected by the regional integration process.

6 REC transport departments should lobby for dedicated grant funding to complement regional transport funding in multilateral development bank. The TFW was made possible because World Bank Group task managers had access to resources from the Trade Facilitation Facility (TFF), a multi-donor trust fund that enabled the World Bank Group to respond more effectively to the increasing demands for support as well as the trade facilitation needs of countries with weak trade facilitation performances. The TFF complemented existing financial resources for technical assistance and advisory work by focusing on implementing activities and providing substantive inputs on design and monitoring of activities. Likewise, the SSATP is a multi-donor that can support several elements of the expanded transport agenda. Finally, there is a need to support a holistic transport agenda that brings WCA on par with other regions. In West Africa, the planned creation of ATWA building from the experience of TradeMark East Africa for West Africa would be an important element. Programs such as the Borderless Alliance, ALCO, the planned West Africa Transport Observatories should be properly funded and their governance structure streamlined. ECCAS and CEMAC need similar programs for Central Africa; there is need for a donor, such as the European Union to take the lead in this process as the DFID did in East Africa or how USAID does through the Southern Africa Trade Hub.
7 Recommendations

The recommendations for the role of the RECs are as follows:

1 Recommendation 1: WCA REC should develop a work program (i) on the political economy of challenges and opportunities for regional transport, drawing on relevant lessons from the past, (ii) that creates a peer-pressure mechanism for developing and sustaining a consensus among national governments, donor agencies, professional associations on the recommendations of the White Paper. Such a program should also empower credible individuals and/or institutions in the public and private sector who can help lobby for the new enhanced regional transport programs; the mechanism could build from the experiences of Trade Facilitation Weeks (TFW).

2 Recommendation 2: WCA RECs should develop their transport programs as a comprehensive package for all transport and logistics services avoiding rent-capture by designing an appropriate regulatory framework for investors and operators. Implementation shall follow an incremental approach, starting with some quick wins to build confidence for more complicated actions.

3 Recommendation 3: The role of REC in the transport sector should be clarified and core investment and operational issues incorporated in national program. RECs should provide the strategic framework for coordination, experience sharing, best practices, peer-pressure and monitoring.

4 Recommendation 4: RECs should prioritize the development of legal and regulatory reforms needed to attract investment in regional transport.

5 Recommendation 5: RECs should prioritize the development and enforcement of incentive schemes for the professionalization of the transport logistics business; with a clear division of responsibility between the regional and national authorities as well as a code of conduct for private operators. Outdated or poorly developed regulations should be updated and harmonized. REC should then prepare a compendium of modern and streamlined transport regulations, standards and procedures.

6 Recommendation 6: Axle load should be prioritized. RECs can lead consensus building for implementing and harmonizing truck axle load standards as well as facilitate the cross-border movement of vehicles and drivers. Policy reform programs with development partners will include effective implementation of standards. The DPO on competitiveness along the Abidjan-Ouagadougou corridor could be extended to other corridors.

7 Recommendation 7: WCA RECs should design and encourage implementation of regional customs guarantee systems; as well as the Inter State Road Transit(ISRT) Convention. The adoption of a single regional transit fee schedule will be a priority of the project.
8 Recommendation 8: WCA REC should develop and advocate a framework for national cargo tracking systems that is interoperable and complemented by a transparent licensing process and a monitored private cargo tracking operator.

9 Recommendation 9: WCA RECs should advocate and develop a strong road transport association to ensure the TIR is implemented as a key trade facilitation tool.

10 Recommendation 10: The organogram of the Secretariat of all WCA RECs should be reviewed, with an inter-departmental task force created in the President’s office. Such a task force should be mandated to oversee the entire trade facilitation and logistics agenda i.e. shall have representatives of departments in charge of transport, customs, private sector development and trade. Such a task force could consolidate from the UEMOA committee overseeing the PRFE (Programme Regional de Facilitation des Echanges).
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# Module 9 Review of the RECS Activities in West, Central, East and Southern Africa

9.1 General Overview of the RECS & The SECs

Sub Saharan African Regions

Regional Economic Communities (RECs) & Sub-Regional Economic Communities (SECs)

Collected by Philippe Cabanius

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acronyms</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>West Africa</strong></td>
<td>4</td>
</tr>
<tr>
<td>1 The Economic Community of West African States (ECOWAS)</td>
<td>4</td>
</tr>
<tr>
<td>1.1 Institutional framework</td>
<td>5</td>
</tr>
<tr>
<td>1.2 Review of ECOWAS Activities in the Sector of Transport in Transit</td>
<td>5</td>
</tr>
<tr>
<td>1.3 Road Safety &amp; Accident Prevention</td>
<td>9</td>
</tr>
<tr>
<td><strong>West Africa</strong></td>
<td>10</td>
</tr>
<tr>
<td>2 West African Economic and Monetary Union (WAEMU)/ Union Economique Et Monetaire De L’ouest (UEMOA)</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Recent UEMOA Transport Decisions</td>
<td>11</td>
</tr>
<tr>
<td>2.2 Road Safety</td>
<td>13</td>
</tr>
<tr>
<td>2.3 Maritime Transport</td>
<td>13</td>
</tr>
<tr>
<td><strong>3 Review ECOWAS Facilitation Program</strong></td>
<td>14</td>
</tr>
<tr>
<td>3.1 Free Movement of Persons</td>
<td>14</td>
</tr>
<tr>
<td><strong>4 Other Initiative</strong></td>
<td>17</td>
</tr>
<tr>
<td>4.1 The Borderless Alliance</td>
<td>17</td>
</tr>
<tr>
<td><strong>Central Africa</strong></td>
<td>19</td>
</tr>
<tr>
<td>6 The Central Africa Economic &amp; Monetary Community / Communaute Économique &amp; Monetaire De L’africre Centrale (CEMAC)</td>
<td>19</td>
</tr>
<tr>
<td>6.1 2001 Road Traffic Code</td>
<td>20</td>
</tr>
<tr>
<td>6.2 River Navigation Code</td>
<td>24</td>
</tr>
<tr>
<td>6.3 Merchant Shipping Code</td>
<td>24</td>
</tr>
<tr>
<td><strong>7 The Economic Community of Central States (ECCAS / CEEAC)</strong></td>
<td>25</td>
</tr>
</tbody>
</table>
Acronyms

West Africa

- ECOWAS (Economic Community of West African States).
- UEMOA/WAEMU (West African Economic and Monetary Union);

Central Africa

- ECCAS (Economic Community of Central African States);
- CEMAC (Central African Economic and Monetary Community);

East & Southern Africa

- EAC (East African Community);
- IGAD (Intergovernmental Authority on Development)
- COMESA (Common Market of Eastern and Southern Africa);
- SADC (Southern African Development Community);
- SACU (Southern African Customs Union).
West Africa

1 The Economic Community of West African States (ECOWAS)

The Economic Community of West African States (ECOWAS) was established by a treaty concluded at Lagos, Nigeria, on May, 1975 and signed by 15 countries as Members: Nigeria, Ghana, Benin, Togo, Ivory Coast, Burkina Faso, Mali, Niger, Guinea, Liberia, Sierra Leone, Senegal, Guinea Bissau, Gambia, and Cabo Verde.

Under the treaty, the objective is to “further the physical cohesion of the Member States and the promotion of greater movement of persons, goods and services within the Community” (Article 40). The stated policy is ambitious and strongly oriented towards sub-regional integration.

Plans for a comprehensive network of all-weather roads within the Community are to be formulated by the Transport, Communications and Energy Commission of ECOWAS, together with plans for reorganizing and improving the railways in view of their future connection (Articles 41 and 42). Policies on shipping and international waterways transport are to be harmonized and rationalized (Article 43). National airlines should be merged in order to promote efficiency and profitability; training of nationals and standardization of equipment will be sought (Article 44).

However, Articles 40 to 44 make no specific reference to the problems of the landlocked countries of the sub-region.

Altogether, the policy as formulated in the treaty was strongly oriented toward the physical development of the transport system and may appear to be more of an investment program than a declaration of policy.

The treaty was replaced on July 24, 1993, by a new treaty concluded in Cotonou, Benin.

The 1993 revised Cotonou Treaty\(^1\) establishes the Economic Communities. According to this new Treaty (Article 3), the main ECOWAS objectives is regional integration through the establishment of a Customs Union:

- Harmonize and coordinate policies and promote integration programs, particularly in transport.
- Establish a common market with a common external tariff and abolish inter-Community tariffs non-tariff barriers.
- Create an economic union.
- Promote joint ventures in trade, transport, and industry.
- Formulate a program for the improvement of coastal shipping services and

\(^1\) The treaty was revised in 2006 and the revision mainly focuses on two changes: the Court of Justice and the ECOWAS Executive Secretariat that was transformed into a Commission composed of the same bodies, as described earlier.
interstate inland waterways and for the harmonization of maritime transport policies and services.

- Promote the development of regional air transport services and implement air transport safety and security programs.
- Encourage the establishment and promotion of joint ventures as well as the participation of the private sector in the areas of transport and tele-communications.

1.1 Institutional framework

ECOWAS institutions comprise the Authority of Heads of State and Government which issues the general guidance. The Council of Ministers (in charge of ECOWAS Affairs) is responsible for the functioning of the Community, makes recommendations, issues, directives on coordination and harmonization matters. The Commission coordinates the ECOWAS institutions activities, particularly responsible for strategic planning, policy analysis and regional integration. The organization structure also comprises the ECOWAS Community Parliament, Economic and Social Council, Court of Justice and Arbitration Tribunal.

The ECOWAS Bank for Investment and Development (EBID), previously called the Fund for Cooperation, Compensation and Development, was established by Article 50 of the Treaty of 1975. It was restructured in 2000-2001 is now called EBID. It has two subsidiaries: ECOWAS Regional Investment Bank (ERIB) and ECOWAS Regional Development Fund (ERDF).

Trade and Transport issues are addressed by two separate offices: the Office of the Commissioner on Trade, Customs, Industry and Free movements and the Office of the Commissioner of Infrastructure which includes a Department of Transport and Telecommunications, in charge of transport policy as stated in Article 32 of the revised ECOWAS Treaty.

1.2 Review of ECOWAS Activities in the Sector of Transport in Transit

The ECOWAS Transport Policy is stated in Chapter VII, Article 32, of the 1993 Cotonou Treaty.: Member States undertake to (i) evolve common transport policies, laws, and regulations; (ii) develop an extensive network of all-weather highways with priority being given to the inter-State highways; (iii) formulate plans for the improvement and integration of railways and roads in the region. (iv) formulate programs for the improvement of coastal shipping services and interstate inland waterways and the harmonization of policies on maritime transport and services.

On May 1980, the ECOWAS Heads of State issued Decision directing the ECOWAS executive secretary to carry out a short-term program and a long-term transport program. The short-term program included institutional action such as the study and adoption of international transport conventions; harmonization of legislation, regulations, and road control systems within the Community; and simplification of airport formalities.
1981 Harmonization of highways legislation

The 1981 Decision about the harmonization of highway legislation in the Community: i) Set up adequate administrative machinery for road transport; ii) Ratify and adhere to the 1968 Vienna conventions on road traffic and on road signs and signals; iii) Introduce the practice of right-hand driving; iv) Adopt standardized equipment, driving licenses, and vehicle documents. It was to be followed by a 1990 Banjul Resolution, intended to serve as a reminder of the 1981 decision, on the Establishment of an Appropriate Administrative Framework, such as a directorate of road transport and to accelerate the implementation of ECOWAS decisions related to the transport sector.

1988 Directive on road charges

On December 1988, the Council of Ministers issued a Directive in which it directs the Executive Secretariat to prepare an inventory of existing road taxes in view of their harmonization at the sub-regional level.

1988 Organization of Road Transport Owners

On December 1988, the ECOWAS Council of Ministers issued a Directive on the implementation of the land transport program. The Directive instructed the Executive Secretariat to (1) prepare a detailed inventory of transport training centers in the fields of road transport and maintenance and (2) examine the means of developing a Community Union Professional Association of Road Transport Owners.

Following this Directive, a West African Road Transporters Union was created as an organ to promote the facilitation of road transport.

1982 Protocol establishing an Insurance Brown Card

The Protocol on the Establishment of an ECOWAS Brown Card Relating to Motor Vehicle Third Party Liability Insurance was concluded in Cotonou, Benin, on May 1982. Its objective was to facilitate payment of damages in case of an accident and to harmonize the settlement of claims between countries of the Community.

The Brown Card was to be issued by national bureaus of insurers, which would settle claims on behalf of the insurers. Partner States were to recognize the Brown Card, enact the necessary legislation for the establishment of the card scheme, and guarantee the solvency of their national bureaus by depositing in their national banks the necessary letter of credit. Local insurers were designated as subsidiary participants to the scheme; they would issue the cards to their policyholders on behalf of the national bureau and compensate this bureau for the

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2 The Centre régional de formation pour l’entretien routier (CERFER), a training center in the field of road maintenance, was established in Lomé, Togo, by a Convention concluded in Abidjan, Côte d’Ivoire, on May 18, 1970, by Côte d’Ivoire, Benin, Burkina Faso, Niger, and Togo. The center was a nonprofit institution supported by a contribution of the member States. It was established to train staff in public work.
any payment to their clients.

1983 Decision on implementation ECOWAS Insurance Brown Card

The 1983 Decision relating to the Implementation of the ECOWAS Insurance Brown Card states that a Council of Bureaus shall consist of a representative of each national bureau (see Article 6, Protocol). The Council has the general function of orientation, coordination, and supervision of the whole ECOWAS insurance scheme. It coordinates the operations of the national bureaus and for that purpose issues a standard inter-bureau contract that determines the maximum amount of settlement between National Bureaus. Disputes between bureaus shall be settled by the Council of Bureaus, and its decision is final. The Council may, on its own initiative or on the initiative of a government party to the protocol, propose changes in the laws and regulations of Partner States in the matter of third-party car insurance and related road traffic matters.

In 1982, ECOWAS took two important instruments to regulate cross border transport corridors:

1982 Convention Regulating Inter-State Road Transportation (TIE) between ECOWAS Member States

The Interstate Transport Convention (TIE) signed in Cotonou (May 1982) seeks to define the conditions under which transportation by road shall be carried out between Member States.

The Convention identifies 102 routes in 15 countries as ECOPAS road axes. It sets forth axle load (11.5 tons), dimensions of vehicles, maximum number of passengers, and minimum periods for mechanical examination of vehicles (three months for goods vehicles and six months for passenger vehicles). Vehicles will be issued licenses valid for one year. Conditions of delivery of licenses shall be defined by bilateral or multilateral agreements between States. The agreements shall also stipulate for State the number and category of vehicles authorized to operate in the other state or states based on tonnage and authorized number of passengers. Inter-State Transport Permit certificate of road worthiness will be issued. Waybills are to be used as evidence of the carriage contract; carriage of passengers and goods in the same vehicle is prohibited; and third-party liability insurance is compulsory. The implementation of this system of transport authorization shall be subject to the establishment and operations of freight offices or road transport stations in charge of inter-State transport in the principal towns of States which are signatories to this convention.

1982 Convention relating to interstate road transit of goods between ECOWAS Members

The Interstate Road Transit Transportation was signed in Lome (May 1982). The convention aimed at facilitating the movement of goods in the sub-region. Goods are to be covered by the Interstate Road Transit Declaration, the Interstate Road Transit Log-Book (ISRT), but Member States may impose additional documents.
Goods shall be transported in means of transport satisfying conditions set forth by the Concession in terms of markings, sealing, etc. Transit offices at border points are not to carry out checks unless irregularities are suspected (Art 18).

The Interstate Road Transit Declaration was followed by two Resolutions:

**A. 1988 Resolution on Program implementation**

Resolution issued at Banjul, (Gambia), on December, 1988 by the ECOWAS Council of Ministers:

- Transit transport shall not, within the territory of the transit State, be subject to any Customs duties, import or export duties, or any special transit taxes levied by the said state. This statement is in reference to the 1965 New York Convention on Transit Trade for Landlocked Countries, and despite the fact that a few ECOWAS member countries did not ratify the Convention.

- Member States shall reduce the number of road checkpoints.

- Interstate road transport and transit conventions shall be ratified by all Partner States.

- Member States shall enforce the agreed-upon axle load limitation of 11.5 tons and implement the ECOWAS international waybill also agreed upon.

**B. 1988 Supplementary Convention on guarantee mechanism for inter-state road transit**

According to the 1982 Convention Relating to Interstate Road Transit of Goods, security for payment of Customs dues was to be provided by a guarantee from a reputable financial institution affiliated with the West African Clearing House or any government-approved institution of a member state.

In December 1988, the council of Ministers directed that the Executive Secretariat should accelerate the setting-up of a single guaranteed system for goods in transit.

In 1990, a Supplementary Convention signed in Banjul in May 1990 stressing the “urgent necessity” to establish a satisfactory mechanism consisting of a chain of national bodies responsible for the guarantee, each national body being designated by each member State through was reiterated in Banjul.

However, the implementation failed, as one of the key provisions expected to facilitate the movements of goods: customs guarantee mechanisms was not put in place.

**1990 Resolution on reducing the number of checkpoints in ECOWAS Partner States (issued in Banjul on May, 1990)**

The Council of Ministers passed a resolution raising again the issue of checkpoints by urging Partner States to reduce their number.
Another resolution taken also in Banjul raised the issue of land locked countries in which the Council of Ministers urged the Member States to give priority in their investments programs to interconnecting roads facilitating access to such countries.

**1994 Resolution to monitor implementation and enforcement of Conventions and Protocols**

Following this Resolution, the establishment of national and regional committees comprising representatives of the departments in charge of transport and road transport industry in each ECOWAS member state have been established to monitor the implementation and enforcement of the different conventions, protocols, and other instruments, especially the monitoring of road blocks and check points on the regional interstate roads and corridors. However, the committees were not able to meet the expected results, due to the lack of funding.

**2012 Supplementary Act on the Harmonization of Standards and Procedures for the Control of Dimensions, Weight and Axle Load of Goods Vehicle within ECOWAS Member States**

Adopted in 2012, this Supplementary Act was signed by all member governments in 2013.

With the support of development partners under different transport projects, mobile and fixed weighbridges and other related facilities logistics equipment have been acquired. The implementation has started, but the progress varies from one country to another, the results in terms of overloading reduction are not yet there.

However, if the transporters resistance to the axle load control in the region is still high, governance issues are still observed on some corridors from government officials in charge of the axle load control and weighbridge operations.

### 1.3 Road Safety & Accident Prevention

**Instruments on road safety and accident prevention:** Two Directives were issued in July 1992 concerned i) the preparation of an ECOWAS program on road safety and road accident prevention., and ii) the creation of national road safety agencies in all ECOWAS Partner States.

**At Community level,** the following measures are to be taken: i) to enforce conventions, protocols, and regulations related to facilitation and road transport, referring to the earlier 1981 Decision on harmonization of road legislation and to the 1982 Protocol on Brown Card; ii) to elaborate a policy for financing road safety programs; iii) to implement road safety education and awareness programs, including organization of annual ECOWAS Road Safety and Accident Prevention Enlightenment Week; iv) create a data bank on road accidents; v) adopt a standard regional format for accident recording; vi) create a West African Union of Road Safety Commissions.
West Africa

2 West African Economic and Monetary Union (WAEMU)/ Union Economique Et Monetaire D’afrique De L’ouest (UEMOA)

On June 1959, the West African Customs Union was established by six Francophone States of West Africa: Côte d’Ivoire, Burkina Faso, Mali, Mauritania, Niger, and Senegal. The objectives and results of the Customs Union were limited, despite a revision of the original Agreement on June 3, 1966, and a tentative broadening of the institution to include Anglophone States in 1967.

The Heads of State decided at the meeting in Bamako, Mali, in May 1970 to create a new grouping of States for increased economic cooperation. On April 17, 1973, the Abidjan Treaty was concluded between the same six States to form the la Communauté Economique de l’Afrique de l’Ouest (CEAO). The 1973 CEAO was intended to encourage the harmonious and balanced development of the economies of its Partner States (Article 3, Abidjan Treaty). Finally, the CEAO was dissolved in 1994 and re-placed by WAEMU.

The treaty establishing WAEMU was signed in January 1994 by Benin, Burkina Faso, Côte d’Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. All the WAEMU Members States are also ECOWAS members. The Treaty was revised in 2003 in Dakar.

WAEMU objective is to promote regional integration and to establish a common market.

According to Article 4, in addition to a monetary union and cooperation, UEMOA’s objectives are as follows: i) Reinforce the competitiveness of Partner States economies in the framework of a competitive market and a rationalized and harmonized legal environment; ii) Ensure the convergence of the performances of the economic policies of Partner States; iii) Establish a common market between Partner States; iv) Coordinate sectoral policies, including transport; harmonize the legislation of the Partner States, especially on taxation.

With regard to Transport. (Protocol II) WAEMU transport policy provides for transport corridors development, emphasizing the importance of ensuring maritime access the landlocked states. The role of the private sector in corridor development and management is equally highlighted, public private partnerships are encouraged.

With regard to Trade. The following measures are to be taken (Articles 76 and seq.) in full compliance with the provisions of the General Agreement on Tariffs and Trade (Articles 77 and 83): i) Eliminate Customs duties between Partner States, quotas, other taxes, and measures of similar impact; ii) Create a common external tariff; iii) Issue common rules regarding competition (private and public enterprises) and subsidies; iv) Facilitate freedom of movement of goods and persons; v) Implement the principle of free movement of goods and persons; vi) Harmonize technical standards.

International routes were designated in the Convention. It also set forth the maximum dimensions and weight of vehicles, signs, markings, etc. Vehicles were to (1) load in one state only for foreign destination; (2) operate through freight offices (bureaux de fret); and (3) comply with Customs and police regulations for border crossings. A bilingual transit card was to be delivered to each vehicle in a format set forth in an annex to the Convention. ECOWAS rules have now rendered this instrument obsolete.

1975 Abidjan Protocol on Inter-State Road Transport. On February 18, 1975, and based on the 1970 Niamey Convention not yet in force, Togo and Niger concluded in Abidjan a Protocol on road transport (Protocole d’accord de transports routiers). The Protocol regulates interstate transport. Its main provisions are the following:

- Freight is distributed between the two countries: two-thirds for Niger and one-third for Togo for goods carried through ports and equally for other goods. Passenger traffic is distributed equally. Mixed traffic (goods and passengers) is prohibited.
- Axle load is limited to 11 tons. Maximum weight of vehicles is 22 tons and 30 tons for a truck plus trailer.
- Rules are specified for licenses, transit card, insurance, etc.
- Freight forwarders and other shipping agents shall adhere to the distribution key just described.
- Transit routes are stipulated.
- Vehicles of each country may operate only transit traffic in the other country. They are not authorized to engage into domestic traffic (cabotage).

Both the 1970 Convention and the 1975 Protocol are significant for their orientation toward a non-market approach of traffic distribution, with quota systems administered by freight bureaus.

2.1 Recent UEMOA Transport Decisions

Several regulations have been issued in 2005 by the Council of Ministers that are directly enforceable in Member States.

2005 UEMOA Regulation on the harmonization of laws and procedures for inspection of the size of trucks transporting goods within the Member States.

2005 December UEMOA Regulation relating to the harmonization of standards and control procedures for size, weight and axle loads of heavy vehicles transporting goods in the Union.
2005 December UEMOA Decision on modalities to implement the regional plan of inspection on the interstate road axis following the additional Protocol II on UEMOA sector policies.

2005 December UEMOA Directive on decreasing inspection points on the interstate roads axis within UEMOA Member States.

In 2009 more than 10 laws were published by the UEMOA Council of Ministers on the transport and management of corridors to reinforce the integration process through the development of roads. The laws developed in 2009 were in response to the difficulties faced in transport and transit facilitation.

**2009 UEMOA Decision on the financing of the border posts, and 2009 UEMOA Regulation defining the legal regime of the border post.**

These two decisions aim at clarifying the scope of the functions of border posts agents and the general framework of the control exercised at the border posts, which also participate in the control of road traffic, especially in corridors.

**2009 UEMOA Decision on the Creation and Management of WAEMU corridors**

This Decision reflected WAEMU road policy strongly oriented toward developing road corridors to give access to inland areas and especially to countries without access to the sea. This Decision taken in December 2009 created 11 corridors and organized their management.

Article 4 states that each corridor is managed by a committee that is under the supervision of a Steering Council (*Conseil d’orientation*) that is in turn under the general supervision of the WAEMU Commission. It also added that several corridors could be managed by a public-private partnership committee of 12 members divided equally among the sectors. This decision is important because it details the scope of the Orientation Council mission (Article 5) as well as that of the Managing Committee (Article 8).

For the first time, that public-private partnership management was envisaged in the management of the corridors in order to improve the facilitation and transit process in the sub-region.

The mission of the Managing Committee is to (1) identify the obstacles impeding traffic and the remedies to them; (2) monitor implementation of the Community regulations of transport facilitation and road transit in the corridor for which it is responsible; evaluate the impact of all facilitation measures on corridor performance; (3) collect and disseminate all information on transport facilitation and transit on the corridor; (4) promote the corridor; (5) inform and increase users’ awareness of any decision or measure that may affect the corridor; and (6) take the necessary steps to enforce the laws on transport facilitation applicable to corridors.

Article 9 emphasizes the public-private composition of the Managing Committee.

**2009 December UEMOA Regulation relating to the legal status of One Stop Border Post (OSBP)**
Joint

As mentioned under the ECOWAS review, UEMOA has been associated in the development of One Stop Border Post (OSBP) with the construction, equipping, and implementation of inspection points at some borders.

2.2 Road Safety

The following ruling instruments have been enacted on road safety in the sub-region:

2009 UEMOA Decision on the creation, organization, and functioning of the Regional Committee of Road Safety

The scope of the committee’s work, detailed in Article 2 of the Decision, includes training road users, land transport, transport infrastructure, country planning, health and assistance for road accident victims, the automobile industry, road security checks, and communications. The mission of this Committee is to provide opinion and recommendations, check that laws are enforced, organize the sub-regional mobilization of the different partners, suggest which norms and standards will be acceptable in the sub-region, promote research, check national and regional capacity building, and consolidate strategies, instruments, and management skills in the road safety area. The committee is composed of three representatives of each Member State.

2009 UEMOA Directive on harmonizing the management of road safety in UEMOA States

According to Article 3, (1) each State shall have a national road safety policy defined by the Parliament or the Government; (2) a multi-sectoral consultative body shall be established to provide opinion on all the queries regarding the concept and the implementation of the road safety policy; A managing structure shall be established with the financial autonomy to lead and implement policy, programs, and national projects on road safety, including data collection on road accidents, research, communications, information, and education and training of road users. An autonomous fund on road safety shall be established to finance activities on road safety. Article 4 calls for the mandatory participation of persons in areas related to training, construction and development of road infrastructure, urban and country planning, road checkpoints, automobile insurance, and justice—among the most important ones.

2009 UEMOA Directive on a computerized system for road accidents in the Union

Article 4 of this directive establishes a form to be completed, a data collection process, and a database. The system established also includes a mapping device of road accident data and a device for monitoring road accident victims.

2.3 Maritime Transport

In 1998 the WAEMU Council of Ministers issued recommendations for a common program
of development of the maritime sub-sector (recommendations dated May 1998 and July 3, 1998) and recommendations for coordination of the different national programs on the matter.

The Council expressed concerns about the declining contributions of Members’ fleets to maritime traffic and the lack of coordination of national strategies in the face of the rapid changes in the international maritime environment.

It also noted the lack of cooperation between operators and the weakness of data collection and communication. It therefore recommended that (1) WAEMU renew coordination efforts in a free market under regulations common to all WAEMU countries and (2) establish national committees in charge of defining the common maritime policy. Ports should cooperate and a WAEMU shipping company should be established following a cooperative effort between all public and private interested parties.

After efforts to define a maritime policy, WAEMU issued a number of recommendations and directives over the next 10 years.

**2008 UEMOA Regulation** on the terms for maritime transport in WAEMU Member States, applicable to domestic maritime transport, interstate maritime transport, and international maritime transport outgoing or incoming at a port of a Member State. This regulation is applicable to both passenger transport and the transport of goods.

**2008 UEMOA Directive** on the implementation of a harmonized institutional framework of the maritime subsector within WAEMU countries. The goal of this directive is to facilitate the implementation of a joint development program of the maritime subsector. It also seeks to harmonize the actions of the different public and private institutions that intervene in the subsector.

At National level, the following measures and actions need to be taken: i) Create National Road Safety Commissions; ii) Introduce compulsory technical control of vehicles; iii) Implement public relations programs and awareness and training of drivers, students, and the public in general; iv) introduce regulatory measures for vehicle, driver, and passenger safety; v) Create a data bank on road accidents.

3 Review ECOWAS Facilitation Program

3.1 Free Movement of Persons

**1979 Protocol on Free Movement of Persons, Residence and Establishment**

This Protocol was concluded in Dakar, Senegal, on May, 1979. It stipulates the right of citizens of the Community to enter, reside, and establish themselves in the territory of Partner States. The Protocol was to be implemented in three phases:

- Right of entry and abolition of visa
• Right of residence
• Right of establishment

Within five years of the entry into force of the Protocol (June 5, 1980) and based on the experience gained from the implementation of the first phase, proposals were to be made to the Council of Ministers for further liberalization.

Rules regarding vehicles. Part IV of the Dakar Protocol sets forth the rules applicable to vehicles:

- Private vehicles are admitted in a Member State for a period not exceeding 90 days on presentation of documents listed in the protocol (valid driving license, etc.).
- Commercial vehicles are admitted for a period of 15 days on presentation of similar documents. The right of access of vehicles was the subject of a subsequent convention on the temporary import of such vehicles.

**1986 Supplementary Protocol on Right of Residence**

The second phase of the Dakar Protocol (right of residence) was the subject of Supplementary Protocol concluded in Abuja, Nigeria, on July 1986. It creates the right of residence in member countries for nationals of other member countries. Such a right includes the right to seek and carry out income-earning employment. A residence card or residence permit is necessary, and the protocol sets forth the conditions and procedure of delivery.

**1985 Convention on the Temporary Importation of Passenger Vehicles into Partner States**

The Convention on the Temporary Importation of Passenger Vehicles into Partner States concluded in Lomé, Togo, on July 1985, as a logical follow-up to the 1979 ECOWAS Dakar Protocol Relating to Free Movement of Persons, Residence and Free Establishment to which it refers. The basic rule (Article 2) is that each Member State shall grant temporary admission free of import duties and without prohibitions or restrictions, but subject to re-exportation to passenger vehicles being imported for private or commercial use during a visit either by the owners of the vehicles or by other persons normally resident outside its territory. Temporary import permits known as Customs Clearance Booklets valid for one year maximum will be issued. The maximum duration of temporary importation shall be 90 days for private vehicles and 15 days for commercial vehicles.

**1982 Convention on inter states transit transit of goods by road (TRIE) signed in Cotonou on May 1982 and its 1990 instituting a TRIE guarantee mechanism adopted on May 1990 in Banjul**

The Convention comprises suspensive arrangements which allow goods to be transported by road, with all duties, taxes and restrictions suspended by the customs service of a given member state, to the customs agency of another member state, under cover of a single document, without any unloading.
TRIE is based on a Customs declaration which: i) indicate the technical characteristics of means of transport; ii) identify the goods, the vehicle and the purpose of the transit; iii) trace the itinerary and offices visited, including frontiers and destination; iv) specify journey deadlines and other requirements with which the driver must comply; v) determine the scope of application of the transit arrangements and declaration (national territory, several frontiers); vi) determine the liability of the principal obligee (carrier/forwarding agent); vii) set the procedures applicable to cases of force majeure; viii) provide statistical support and information for use in dealing with offences, settling disputes and effecting cooperation between customs services.

Application of the TRIE Convention is the responsibility of customs services and the consular offices appointed in administering the TRIE guarantee fund, as laid down in the TRIE Convention.

Despite, the Additional Protocol organizing the guarantee mechanism, the TRIE faces implementation difficulties and limitations.

**2003 Facilitation Program.** Because insufficient progress was being made in facilitation, the Authority of Heads of State and Government met in Dakar in January 2003 and issued a Decision Relating to the Establishment of a Regional Road Transport and Transit Facilitation Program in Support of Intra-community Trade and Cross-border Movements.

The program was intended to (1) establish joint border posts; (2) create observatories to identify bad practices; and (3) launch an awareness campaign for implementation of the 1982 Convention Relating to Inter State Road Transit of Goods. The Trans-Coastal Lagos-Nouakchott Corridor and the Trans-Sahelian Dakar-N’Djamena Corridor were selected for implementation of the program.

Member States were within 12 months to implement a series of measures at the national level to support the program, such as identifying sites for establishing joint checkpoints, establishing monitoring committees and road safety units, developing the Brown Card system, etc.

The ECOWAS Executive Secretariat was placed in charge of monitoring implementation and requesting multinational grants from development partners to finance the desired and necessary actions.

Following this Facilitation Program, the Abidjan-Lagos Corridor Organization (ALCO) was launched and is viewed as a perfect success story of ECOWAS Member States.

**One Stop Border Post (OSBP)**

The construction of Joint Border Posts (JBPs) was seen as a key component of the ECOWAS Regional Road Transport and Transit Facilitation Program.

Converting a two stop border crossing point into a one stop border post while ensuring that the regulations of the countries that share borders are complied with is a relatively recent phenomenon.
An OSBP is a one stop form of border crossing point jointly managed by neighboring countries. And where activities are streamlined to maximize efficiency by reducing bottlenecks and avoiding duplication of clearance procedures at borders for people and goods.

The Programme for Infrastructure Development in Africa (PIDA) Vision 2040 study recommends the construction and opening of 13 OSBPs in West Africa.

In West Africa, UEMOA and ECOWAS and Development Fund, have taken the lead to develop joint Border posts at several sites with the EU-supported Transport Facilitation Program funded under the EU 9th European Development Fund (EDF). The ECOWAS Commission have selected seven OSPBs along the border of nine ECOWAS Member States, during a first phase.

The Malaville (Benin-Niger) and the Cinkansé (Togo-Ghana) are already functional. Three other OSBPs are still under design or construction including Sémé Kraké (Nigeria/Benin), Akuna –Noepe (Togo/Ghana), Eludo-Noé (Ghana/Côte d’Ivoire). Two remaining OSBPs require funding, Kouremale (Guinea/Mali) and Paga (Ghana/Burkina Faso).

OSBP combine hard components (Buildings and circulatory roads; ICT Connectivity) and soft components (Legal framework and operational procedures; Management). Best practices show that the soft components must be developed concurrently with the construction works to ensure that the infrastructure is operational after construction. However, in order to make OSBPs fully operational, there is a need for further legislation and harmonised procedures.

4 Other Initiative

4.1 The Borderless Alliance

The Borderless Alliance represents a private sector-led coalition to address one key issue in West Africa, the transport costs which are among the highest in the world, translating into lower prices for the goods of farmers and other producers and making imports more expensive. Major causes of high transport include bribery, administrative delays, arbitrary check points, high taxes, inefficient trade procedures and poor infrastructure.

Starting in 2011, in conjunction with the USAID West Africa Trade Hub, the Borderless Alliance began establishing Border Information Centers (BICs) at border posts along highly-trafficked trade corridors in the region as a kind of observatories to identify inappropriate practices on major interstate roads. Border Alliance monitors corridors in eight countries, Benin, Burkina Faso, Côte d’Ivoire, Ghana, Mali, Niger, Senegal and Togo. Currently, six BICs are operating, including the first ine on the Ghana –Togo border and the newest at the Ghana –Cote d’Ivoire border.

THE BICs advise public or private stakeholders on the regional agreements designed to streamline rules and procedures, as well as practical measures for easing congestion through organizational and infrastructural improvements.
Border Alliances provides also a vehicle for the private sector to voice its concern, collaborate with decision makers on finding solution to common problems and encourage decision makers to take corrective action. It has more than 50 dues paying members from the private sector across West Africa. Its membership base draws from a broad range of organizations including port authorities, freight forwarders, logistic operators, manufacturers, traders and farmers.


The ECOWAS Vision 2020 sets the strategic objective of a borderless region, sustainable development, peace and good governance, and integration into the global market, coupled with a commitment to an ECOWAS of people rather than of States. The ECOWAS VISION 2020 was adopted in June 2008.

The six strategic priorities are those set according to the strategic pillars and is the basis for all discussions on the Commission’s functions and purposes. These priorities are to promote good governance, justice and upgrade the conflict prevention, management, and resolution mechanism; promote the development of Infrastructure for a competitive business environment, sustained development and cooperation in the region; deepen economic and monetary integration; reinforce institutional capacity and strengthen the mechanism for integration into the global market.

Under the two ECOWAS Strategic Plans, the priority and fundamental objectives of the land transport sector are the following:

Road transport. (1) Improve the efficiency and efficacy of road transport between states with a view toward reducing transportation costs and poverty; (2) improve the procedures and regulations (simplified and harmonized) of transportation and interstate transit and ensure safety and security at the ports along the priority corridor (Abidjan–Lagos); (3) establish a supervisory and coordinating organ to implement the program for the facilitation of transportation within regional organizations (ECOWAS and WAEMU) and in Member States; (4) reduce the propagation of the HIV/AIDS pandemic on the roads and borders between states; and (5) ensure systematic surveillance of abuses on the road between the states.

Rail transport. Develop an efficient network of railways interconnected in the ECOWAS sub-region.

Maritime transport. (1) Develop dependable, profitable, viable, and affordable maritime transport and (2) harmonize maritime transport policies.
Central Africa

6 The Central Africa Economic & Monetary Community / *Communaute Économique & Monetaire De L'afrique Centrale (CEMAC)*

The Treaty establishing the Economic and Monetary Community of Central Africa was signed in 1994 and concluded in N'Djamena, Chad, on February 1998. It officially replaces the former UDEAC treaty (1964) and was slightly revised in Yaoundé, Cameroon, in June 25, 2008, to create the Community Parliament.

CEMAC is composed of Cameroon, Gabon, Congo, Equatorial Guinea, Chad and Central African Republic.

Whereas UDEAC was based on cooperation between Partner States, CEMAC pursues an approach of integration. Its main policy objectives, not formulated in the instruments but only in separate declarations of intent, are the following:

- Reinforce the competitiveness of the economic and financial activities of the countries of CEMAC by harmonizing the legal framework (investment code, competition, regulation, etc.).
- Coordinate economic and budgetary policies to ensure coherence with the common monetary policy.
- Establish a common market, with total freedom of establishment, immigration, and free movement of goods and services.
- Coordinate sectorial policies, including trade and transport policies.
- Promote freedom of movement, residence, and establishment.

Currently, CEMAC countries share a common financial, regulatory, and legal structure, and maintain a common external tariff on imports from non-CEMAC countries. In theory, tariffs have been eliminated on trade within CEMAC, but full implementation of this has been delayed. Movement of capital within CEMAC is free.

The institutional organization comprises the Conference of Heads of State, the Commission, the Assembly, the Court of Justice. CEMAC Commission acts as an executive secretariat of the Community, structured into 4 directorates led by 4 commissioners: “Common Market”, “Infrastructures and Sustainable Development”, “Economic, Monetary and Financial Policies”, “Human Rights, Governance, Human and Social Development”.

At the regional level, transport issues are managed under CEMAC Commission through the Directorate of Infrastructure and sustainable development. A transport section within the Directorate is in charge of the coordination of the CEMAC Transport and Transit Facilitation Program implementation. The customs union department also intervenes for the CEMAC new transit regime.
implementation. A joint technical committee composed of representatives of transport and customs administrations in Cameroon, Chad, Central African Republic and CEMAC Commission have been established to oversee the overall program implementation.

Very soon after its creation, CEMAC issued the following new regulations and codes to replace those issued by UDEAC: the River Navigation Code (*Code de la navigation intérieure*) and Hazardous Cargo Regulations (*Règlement de transport des marchandises dangereuses*) in 1999; the Civil Aviation Code (*Code de l’aviation civile*) in 2000; and the Merchant Shipping Code (*Code communautaire de la marine marchande*) and Road Traffic Code (*Code de la route*) in 2001. To date, the two UDEAC conventions on road transport and intermodal transport which has been reviewed under ECCAS are still in effect.

### 6.1 2001 Road Traffic Code

The Road Traffic Code was issued in Bangui as a Regulation on August 2001. Enforceable in all CEMAC States, it supersedes any earlier domestic provision, particularly the 1989 UDEAC Road Traffic Code. Regulations apply to the following: (i) driving permits; -ii) Weight, dimensions, and other vehicle characteristics; iii) Traffic; and, iv) Signals. Nine annexes are attached, with details of marks and signals.

Other CEMAC legal instruments since 2004 relevant to transport and transit facilitation

#### 2005 Regulation

Adopting facilities granted to travelers. The facilities granted are administrative measures that allow travelers to speed up the Customs procedures and the police formalities at their arrival and departure. The regulation establishes a system of a double circuit, green or red—a simplified Customs system for travelers at the frontiers. The green circuit allows the traveler without commercial goods to be exempt from Customs control. The red circuit requires the traveler with commercial merchandise to fulfill all the formalities required by Customs.

#### 2005 Recommendation

Related to freedom of movement of people in CEMAC. It establishes the freedom of movement of people within CEMAC, provided that a valid national identity card or passport is produced and the visit in another Member State does not exceed three months.

#### 2006 Regulation (March 2006)

Adopt a program on the regional facilitation of transport and transit in CEMAC. The objectives of the program are to (1) create a coordinating committee for its implementation; (2) coordinate and evaluate the program implementation; (3) harmonize the laws between the Member States; (4) facilitate transit; and (5) implement a pilot project in the Douala-N’Djamena and Douala-Bangui corridors. The time frame to implement this program was set from March 2006 through December 2008.

**Components of the pilot project on the Ndjamen-Douala-Bangui-Douala corridors.** The pilot project is divided in two sections: actions and objectives. The main actions are to (1) create an observatory to monitor operation of the corridors; (2) introduce a legal regime for interstate
transit; (3) improve border crossings; and (4) strengthen capacity building at the border crossings. The main objectives are to (1) on a regular basis and in a neutral manner, identify, analyze, and publish the facts, practices, irregularities, and improper behaviors observed on the interstate major roads in the transport of persons and merchandise; (2) arrange for an interstate transit regime (TIPAC); (3) facilitate border passage; (4) put in place mechanisms for freight monitoring; (5) strengthen intermodal interfaces (ports, railways); (6) improve merchandise safety; (7) identify needs (safety, facilitation, interface between information technology systems, rest areas for trucks coming from landlocked countries); and (8) improve the social impact of projects.

**Evaluation of the pilot project.** The facilitation component of the pilot project is its weakest point. The following activities need improvement and strengthening: communications between stakeholders, especially within the port community, including the interface between various information and communication technologies; the transit regime and border crossing through car- go tracking and improved border post constructions; port safety and security; and the CEMAC Customs union and national Customs. Stronger support is needed as well for transport facilitation institutions and better coordination and management of the project’s activities.

Finally, the irritating problem of unlawful checkpoints on roads and rivers needs to be solved. These checkpoints represent a financial cost for road users, and they harm the reputations of local governments.

**2006 Decision** related to the Establishment of a Management Committee for interstate cross-border corridors in Central Africa.

This Decision made on March 2006, by CEMAC’s Council of Ministers includes three main provisions relevant to the transport and transit facilitation. First, the objectives of the Committee are to encourage commercial activities along the corridors, facilitate partnerships among nationals of the Member States, encourage reduction of the costs associated with freight transport, and implement best practices in Customs transit. Second, the Committee is composed of representatives of the departments of road transport, departments of Customs, professional organizations of road carriers, transit companies, and the CEMAC Commission. Finally, the Committee’s responsibility is to monitor the activities related to the competitiveness of corridors, identify the obstacles to traffic flow, and provide solutions to improve or eliminate those issues.

**2006 Decision** establishing a Coordinating and Monitoring Committee to follow implementation of the regional program on transport and transit facilitation in CEMAC.

This Decision was adopted on March 2006. Its main objectives are to coordinate and monitor implementation of the program components, which are to (1) update the road program; (2) prepare and implement the facilitation program within the sub region; (3)
implement the pilot project in the Douala-N’Djamena and Douala-Bangui corridors; (4) implement interventions in the port’s area and accompanying measures; (5) assess the harmonization between national and regional programs; (6) secure monitoring of maintenance on the interstate road network; (7) identify the obstacles to the implementation of projects and propose solutions to accelerate their implementation; and (8) assess progress made in the program’s implementation.

The Coordinating and Monitoring Committee is composed of the CEMAC Commission, which chairs the committee, and other members: four representatives of Member States nominated by the department in charge of public works, the department financing road maintenance, and the department of road transport and Customs; one representative of the transit carriers trade unions of Member States; and three representatives of CEMAC of which two are from the department of transport and telecommunications and one from the department of the common market. The Secretariat of the Coordinating Committee is assured by the CEMAC department of transport and telecommunications. The Coordinating Committee may also call on any expertise that is useful in fulfilling its purpose.

2007 Decision establishing a Committee of Monitoring and Evaluation in the area of freedom of movement of people. This Decision was adopted on December 2007. The Committee is composed of the Heads of cross-border police and immigration, civil society, national departments in charge of regional integration, and the CEMAC Commission. Representatives of CEEAC and EAC participate as observers. The conclusions of the Committee are transmitted to the CEMAC Commission, which follows up with Member States and the Council of Ministers.

2007 Decision establishing a Mixed coordinating Technical Committee for implementation of the program on Transport and Transit facilitation funded by the African Development Fund. The Committee is responsible for monitoring all activities related to the implementation of the transit and transport facilitation financed by the African Development Fund in the Douala-Bangui and Douala-N’Djamena corridors. The Committee is also responsible for coordinating and following up on the different components of the program. It may also examine and give its opinion on all its technical aspects, identify the obstacles to its implementation, and propose solutions to accelerate its implementation. The Committee is composed of the directors of national roads, land transport, and Customs of the States that are beneficiaries of the program or their designated representatives. Coordination of the project activities is ensured by the Commission of CEMAC.

2007 Regulation establishing the Regulation on the legal regime of the Community transit and the mechanism of a single security or guarantee.

The guarantee of the merchandise in transit is required to secure the payment of the debt that may arise from its transit. As for the main provisions of the regulation, Appendix 1, Chapter IV, describes the rights and obligations of the Parties; Article 10 states the steps to be taken to
constitute the guarantee; Article 12 establishes the mutual recognition of all the legal documents presented for the transit; and Annex 1, Article 1, stipulates that this regulation covers the goods that transit throughout the Community with a final destination outside the CEMAC region. The text states that this regime allows the movement of non-Community goods from one border to the other to be exempted from import taxation. Article 7 requires national Customs authorities to assist one another from an administrative standpoint.

2008 Regulation establishing Modification of the Customs code relevant to Community transit.

The following articles were modified. Article 155 (4) of Chapter II which is related to the movement of goods through a non-Community Member State or by sea, states that the foreign goods with a final destination to Member States are subject to import taxes and duties through a guarantee system. Chapter III on transit modifies the definition of what is called “transit.” According to the modified provision, transit is “the movement of goods under Customs with a final destination or a point of departure from one existing custom territory.” The other articles (162 to 173) have also slightly modified the transit regime within CEMAC.

2009 Regulation Establishing a Transit Committee.

The main provisions of this Regulation are Articles 2 and 5. Article 2 describes the composition of the Committee: two representatives of each Member State. Article 5 enumerates the duties of the Committee, which are (1) to ensure the effective implementation of transit rules; (2) to act as an arbitrator when conflict arises; (3) to propose recommendations and provide technical advice on the transit and guarantee procedures; and (4) to update at least once a year a list of merchandise that is at risk. The recommendations and advice of the Committee are submitted to the Council of Ministers for its approval.

Achievements: The major achievement was the improvement of Douala-Bangui/ Ndjamena corridor road network condition all seasons operational while in the past, the traffic was regularly interrupted during the rainy season. Most investments were allocated to roads construction and rehabilitation in Cameroon and Central African Republic (CAR), and Chad, especially in Cameroon as the corridor Douala-Ndjamena via Kousseri is 99% located in Cameroon. This permitted to reduce the transit time from 9 to 5 days from Douala-Bangui Corridor before the crisis in CAR, and from 12 to 8 days for Douala-Ndjamena corridor.

Establishment of Douala single window coupled with the Cameroon customs reforms including the instauration of performance contracts have contributed to reduce Douala port dwell time.

The rail transport has been improved, although the dwell time at the rail terminal in Douala and Ngaoundere are still long. The performance of the railway linking Douala to Ngaoundere (884 km) has improved, the acquisition of new locomotives and wagons as well as the rehabilitation of some critical sections over the past 4 years permitted to increase the rail line capacity and reliability. It is used to connect Northern Cameroon and Chad through the multimodal platform of Ngaoundere, and
Central African Republic via the multimodal platform of Belabo. Plans are under consideration to improve/upgrade the infrastructure and equipment of Edea, Belabo and Ngaoundere terminals.

CEMAC has also endorsed a number of Codes addressing river transport, regulating River, Maritime and Air transport

### 6.2 River Navigation Code

The River Navigation Code was issued on December 1999, as CEMAC/RDC (Democratic Republic of the Congo) Regulation. The code is mainly oriented toward the safety issues of river navigation, with some approaches to management issues. The 31 annexes give details on markings, signals, forms, etc. Pending the issuance of a *Code de la navigation intérieure* CEMAC/RDC set of rules on transport operations in river shipping, one annex deals with the limitations of liability of river carriers. But there are no provisions on carriage contracts for intermodal or multimodal transport and other commercial aspects of river transport. There is no provision as well on the international regime of rivers in CEMAC and on the rights and duties of Member States.

### 6.3 Merchant Shipping Code

The CEMAC Merchant Shipping Code was issued in Bangui, Central African Republic, on August 2001.

It replaced the 1994 UDEAC Merchant Shipping Code. The new Code rules on the following: i) Applicability of the law to vessels; ii) Ship safety, classification, salvage, and wrecks; iii) Marine environment and pollution; iv) Seamen; v) Maritime transport, including charter parties, bills of lading, and other carriage contracts; vi) Shipping and forwarding agents, consignees of cargo, pilots, and stevedoring companies; vii) Court and other procedures related to shipping.

The Merchant Shipping Code makes reference to and follows the rules set forth by international conventions, even when CEMAC Member States did not ratify them (such as the 1965 London Convention, the 1965 New York Convention, the 1982 United Nations Convention on the Law of the Sea. Finally, the legal regime of the sea carriage contract is that of the 1978 Hamburg Rules. Altogether, the Code appears to reflect the views of the International Maritime Organization (IMO) on points that are still very much in dispute in the maritime community.

The approach to Maritime transport shipping is regulatory rather than market-oriented. The CEMAC Code (Article 5) simply reserves to CEMAC flag vessels domestic coastal shipping and sub-regional coastal shipping.

The Heads of State adopted the 2001 Recommendation relevant to the establishment of an ad hoc commission to revise the Merchant Shipping Code.
The Economic Community of Central States (ECCAS / CEEAC)

The Economic Community of Central African States (ECCAS) (la Communauté Économique des États de l’Afrique Centrale -CEEAC) was established in October 1983, in Libreville Gabon – Treaty of Libreville - in replacement of UDEAC (Union Douanière et Économique de l’Afrique Centrale), following a summit meeting held in December 1981 where the leaders of the UDEAC, agreed in principle to form a wider economic community of Central African states. To date, however, CEMAC has not achieved its objective of creating a customs union.

ECCAS is composed of Angola, Cameroon, Chad, Central African Republic, Gabon, Equatorial Guinea, Congo, Democratic Republic of Congo, Burundi, Angola and Sao Tome. In 2007, Rwanda left ECCAS in order to better focus on its membership in the EAC and COMESA.

ECCAS began functioning in 1985, but was inactive for several years because of financial difficulties (non-payment of membership fees by the member states) and the conflict in the Great Lakes area. The war in the DR Congo has been also been particularly divisive, as Rwanda and Angola fought on opposing sides.

ECCAS has been designated as the official regional bloc (REC) for Central Africa, but formal contact between the AEC and ECCAS was only established in October 1999 due to the inactivity of ECCAS since 1992. The AEC again confirmed the importance of ECCAS as the major economic community in Central Africa at the third preparatory meeting of its Economic and Social Council (ECOSOC) in June 1999. A number of UDEAC protocols, agreements or regulations are still in place under their original UDEAC qualification.

7.1 Institutional framework

The institutional organization comprises the Conference of Heads of State, the Council of Ministers, the Court of Justice, the General Secretariat, the Consultative commission, and Specialized technical committees. As for the other RECs in Central and West Africa, ECCAS has no dedicated corridor management unit. A transport unit is in charge of all transport related issues for all transport modes, in coordination with the national transport departments of member states. Some ECCAS member countries are overlapping ECOWAS and CEMAC. Any joint corridor project will require the harmonization of procedures, regulations, standards, etc.

On January 24, 2003, the European Union (EU) concluded a financial agreement with ECCAS and CEMAC, conditional on ECCAS and CEMAC merging into one organization, with ECCAS taking responsibility for the peace and security of the sub-region.

The ultimate goal of ECCAS is to establish a Central African Common Market. At the Malabo Heads of State and Government Conference in 1999, four priority fields for the organization were identified:

- to develop capacities to maintain peace, security and stability - as essential prerequisites for economic and social development
to develop physical, economic and monetary integration
• to develop a culture of human integration
• to establish an autonomous financing mechanism for ECCAS

Transport and communications, trade and customs are among the priority areas highlighted by the ECCAS treaty.

With regard to transport, ECCAS Member States are committed to develop a wide program that includes to promote the integration of transport and communications, increase the efficiency of the different transport modes, and harmonize transport and communications regulations.

In 2004, a Transport Master Plan in Central Africa was approved to facilitate the access to landlocked States, and connect international and regional market places.

A Monitoring and Implementing Committee was established to promote the master plan, set resource mobilization mechanisms. Most activities/projects identified are part of the NEPAD program in Central Africa, some of them are underway, funded by member states, regional financial institutions and multilateral donors.

In December 2008, a cooperation protocol was signed in December 2008 between ECCAS and ECOWAS on the Transport and Transit Facilitation Program along the Transnational Corridor of Bamenda-Enugu (Cameroon and Nigeria) that includes Mfum bridge and Joint border post.

ECCAS facilitated the conclusion of MoU between the Congo and Gabon on the Brazzaville-Libreville road and between Congo and Cameroon on the Brazzaville-Yaoundé road. Joint technical committees have been established to supervise the project implementation in both countries.

**Two major UDEAC sets of rules are still in effect:**

A. The 1996 Interstate Convention on Road Transport of General Cargo,


### 7.2 The Interstate Convention on Road Transport of General Cargo

On July 1996, the Council of Heads of State of UDEAC agreed on the legal framework of road transport of general cargo in the sub region. This framework gave birth to the *Convention Inter États des Transports Routiers de Marchandises Diverses* known as the **General Cargo Road Convention or GC Road**.

The preamble of the Convention insists on the desire to set forth the format and legal regime of the transportation documents and the carriers’ liability regime. This wording was taken from the 1956 Geneva Convention on the Contract for the International Carriage of Goods by Road (CMR) and based on the 1890 Bern Convention on International Railway Transport (modified). However, the clauses in the CMR Convention that deal with multimodal transport are missing from the General Cargo Road Convention as the UDEAC Heads of State agreed on a separate convention on such
transport.

Apparently, the Parties to the transport contract are free to execute a contract different from that resulting from the Convention, or to use some of the clauses of the Convention and discard others. However, an important restriction derives from Article 51, which states that any stipulation derogatory to the provisions of the General Cargo Road Convention would be void.

The salient points of the Interstate Convention on Road Transport of General Cargo follow:

- **General (Chapter I).** The General Cargo Road Convention is applicable to all general international cargo involving a payment when either the country of departure or the country where delivery takes place are parties to the Convention whatever the nationality or domicile of the carrier.

- **Waybill (Chapter II).** Transport takes place under a waybill of four copies (three in the CMR Convention) as evidence of the transport contract. The waybill format is detailed in the General Cargo Road Convention and is compulsory.

- **Liability (Chapter III).** The carrier is liable except in "circumstances that it could not avoid and to the consequences of which it could not escape"—that is, basically, force majeure.

- **Claims and litigation (Chapter IV).** There are statutes of limitation for delays in reservations, claims, and litigation. In case of arbitration, arbitrators are bound by the stipulations of the Convention.

### 7.3 Convention on Interstate Multimodal Cargo Transport

International multimodal transport takes place when, under the coverage of a single document, goods are transported from one country to another through different modes of transport.

On July, 1996, UDEAC's Council of Heads of State agreed on the legal framework of multimodal transport in the subregion. The framework took the form of the *Convention inter-États de transport multimodal de marchandises*.

The 1980 United Nations Convention on International Multimodal Transport of Goods did not come into force as it was not ratified by a sufficient number of countries. UDEAC's initiative therefore filled a gap in international law and provides its Central Africa member countries with a clear and undisputable framework for multimodal transport operations, the provisions of which were in fact borrowed from the non-ratified international convention.

*Articles 2 to 4 and 29.* Recourse to the UDEAC Multimodal Convention is compulsory; it
applies automatically, without restriction, when acceptance and delivery of cargo takes place in one of the party states. There is no room for a clause discharging all or part of the carrier's liability.

Chapter II. A multimodal waybill (document de transport multimodal or DTM) is signed by the carrier and may be negotiable. The format and content of the waybill are in accordance with the provisions of the Convention. The DTM is transferable.

Chapter III. The carrier is presumed liable for damages or delays in delivery unless it provides evidence that it, its employees, and agents "took all the necessary measures that could reasonably be required for the avoidance of the [damage or delay] and its consequences" (Article 16). This is an obligation of due diligence. A ceiling of liability is set. (Article 21).

The Convention includes some UDEAC procedures already outlined in 1991 under the Transit international dans les pays de l'Afrique centrale (TIPAC).

TIPAC was a Customs regime for international transit, with the objectives of simplifying Customs procedures at origin and destination as well as during transit, and assigning liability for Customs duties to the carrier involved in a specific transit operation.

Transit was on a fixed itinerary. Cargo in transit was covered by a TIPAC booklet describing the freight transported and used for Customs and other controls. The Regional Guarantee Fund issued the book-lets, provides the necessary financial resources for guaranteeing payment of Customs dues, and settles any litigation.

7.4 Interstate Regulation on Licensing of Road Carriers

On July 1996, UDEAC’s Council of Heads of State agreed on the legal framework for licensing road carriers in the sub-region (Act 5/96- UDEAC-611-CE-31). All road carriers, either for transport for own account or for professional transport, need to be licensed and to adhere to the third-party liability insurance guarantee system (TIPAC). Licenses are given by the ministries of transport of each Member State for a duration of five years and for a specific road network or specific itineraries.

East Africa

8 The East African Community (EAC)

The Commission itself had been equipped with a secretariat based in Arusha that was, among other things, in charge of supervising the elimination of non-tariff barriers in the subregion. Rwanda and Burundi acceded to the EAC Treaty on June, 2007, and became full members of the East African Community as of July 1, 2007.

The Treaty was subsequently amended on December 14, 2006, and August 20, 2007.

**Institutions**

According to Article 9, the organs of the East African Community are as follows: i) Summit, composed of Heads of State; ii) Council, composed of ministers; iii) Coordination Committee; iv) Sectorial committees; v) East African Court of Justice; vi) East African Legislative Assembly; vii) Secretariat; viii) Such other organs as may be established by the Summit.

The East African Community also has various other institutions linked with transport such as the Lake Victoria Basin Commission (LVBC), which coordinates the sustainable development agenda of the lake, and the Civil Aviation Safety and Security Oversight Agency (CASSOA).

**Transport policy**

Chapter 15 of the Treaty is entitled Cooperation in Infrastructure and Services and covers transport. Common transport policies are the subject of Article 89. The Partner States undertake “to evolve coordinated, harmonized and complementary transport and communications policies… [and] to improve and expand existing links and establish new ones.”

To this end, the Partner States shall take steps to: i) Develop harmonized standards and regulatory laws, procedures, and practices; ii) Construct, upgrade, and maintain facilities; iii) Review and redesign intermodal transport systems and develop new routes; iv) Grant special treatment to landlocked countries; v) Provide security and protection to transport systems; vi) Harmonize and conduct joint training of personnel; vii) Exchange information on the subject.

These provisions are further detailed in Article 90, Roads and Road Transport; Article 91, Railways and Rail Transport; Article 92, Civil Aviation and Civil Air Transport; Article 93, Maritime Transport and Ports; Article 94, Inland Waterways Transport; Article 95, Multimodal Transport; Article 96, Freight Booking Centers; and Article 97, Freight Forwarders, Customs Clearing Agents and Customs Agents.

**Importance of infrastructure**

The EAC Development Strategy for 2006-2010 emphasizes deepening and accelerating the integration process. It states that “provision of adequate and reliable supporting infrastructure is a key area of intervention for deepening and accelerating integration through the sharing of the production, management, and operations of infrastructure facilities, hubs and development corridors. Priority sectors include energy, roads and
Altogether, the EAC Treaty is the most detailed of all African cooperation treaties in the areas of transport and communications.

**Transport provisions**

The main transport provisions and stipulations are:

**Article 90.** The provisions on transport deal mainly with its technical and regulatory aspects. Except for noting the common requirements for insurance, there is no reference to the terms of carriage contracts and to the adoption of modern contractual formats. However, the Article mentions the importance of developing competition to make road transport more effective. There is a marked concern for equal treatment of carriers in all Partner States (Article 90 (t) and 90 (u)) and a reference to the need to “gradually reduce and finally eliminate non-physical barriers to road transport within the Community” (Article 90 (s))—a perennial problem in the Africa region.

**Article 91.** Rail transport is to be coordinated and new lines constructed where necessary. Railways would be made more efficient by developing their managerial autonomy. Documentation, packaging, procedures, standards, etc. would be harmonized, and tariff discrimination would be eliminated.

**Article 93.** The liberalization and commercialization of port services are seen as a way of promoting efficient and profitable port services. Landlocked States would be granted easy access to port facilities and opportunities to participate in the provision of port and maritime services. The Partner States would agree to charge nondiscriminatory tariffs on goods from their territories and from other Partner States except where their goods enjoy domestic transport subsidies and apply the same rules and regulations in respect of maritime transport among themselves without discrimination. Other provisions refer to other objectives of coordination and harmonization.

**Article 94.** Partner States shall harmonize their inland waterway policies and harmonize and simplify their rules, regulations, and administrative procedures and tariffs. Space would be provided on board vessels, without discrimination. Joint ventures would be developed.

**Article 95.** Partner States shall harmonize and simplify the regulations, procedures, and documents required for multimodal transport. They shall develop intermodal exchange facilities such as inland clearance depots and dry ports. They will take measures to ratify or accede to international conventions on multimodal transport and containerization and take the necessary steps to implement them.

**Article 96.** Partner States shall encourage the establishment of freight booking centers.

**Article 97.** Partner States shall harmonize the requirements for registration and licensing of freight forwarders, Customs clearing agents, and shipping agents. They shall allow any
person to register and to be licensed as a freight forwarder or other transport services agent, and they shall not restrict the commercial activities of such a lawfully licensed agent. There are indications that some Partner States tend to limit access to transport services professions to their own nationals.

**Customs**

The Partner States agree to develop an East African trade regime and jointly develop (1) trade liberalization, (2) a Customs union, and (3) a common market.

*Customs Union rules (Article 75).* These rules are to be contained in a protocol to be issued within a period of four years. The rules include the elimination of internal tariffs and of nontariff barriers; the establishment of a common external tariff; the establishment of measures on dumping, subsidies, and countervailing duties; and the simplification and harmonization of trade documentation and procedures. The EAC countries established a Customs Union in 2005 and are well advanced in working toward the establishment of a common market. A monetary union is also scheduled and possibly a political federation of the East African States.

*Establishment of a Customs Union (Article 75).* The establishment of a Customs Union shall be progressive. As of a date to be determined by the Council, the Partner States shall not impose any new duties and taxes or impose new ones or increase existing ones. Nor are they to enact legislation or apply administrative measures that may directly or indirectly discriminate against the same or like products of other Partner States.

*Common Market (Article 76).* A protocol shall be issued on a Common Market among the Partner States. Within the Common Market, there is to be free movement of labor, goods, services, and capital, and the right of establishment. The Common Market Protocol was signed in November 2009 and ratified in 2010 by all the States party to it.

*Evaluation of the Treaty implementation and progress on transit and transport facilitation as of July 31, 2010*

**Transport provisions in general**

EAC is party to the Tripartite agreements which have been signed in the fields of road transport, inland waterway transport, rail transport, and civil aviation transport.

**Rail transport**

Two new corridors are actually proposed: (1) Lamu Corridor: Port Lamu (deep water port)—rail to Addis Ababa to Juba to Pakwach; and (2) Bas Congo Corridor: complete route from Mombasa to Banana (Democratic Republic of the Congo) with various options to connect the eastern Democratic Republic of the Congo with the Atlantic Ocean.

**Inland waterway transport**

The Protocol establishing the Lake Victoria Basin Commission (LVBC) was signed on
November 29, 2003, and ratified in December 2004. The current coordination arrangements involve the Minister of water of Burundi, the Minister of natural resources of Rwanda, and Ministers of water/mineral resources of Kenya, Tanzania, and Uganda.

**Customs**

The revised version of the 2009 East African Community Customs Management Act incorporates all amendments concluded to December 2008. The Protocol on the Establishment of the East African Customs Union deals mainly with the technical and regulatory aspects of the union (Articles 6 to 8). As of 2010, there were still many challenges affecting implementation of the Customs Union such as lack of an efficient coordination and monitoring system at the local and regional levels. There were also some conflicting interests at the national and regional levels. In November 2009, the Member States signed the Common Market Protocol and ratification, followed in 2010 by all the Partner States.

**Institutions**

The institutions for Eastern and Southern Africa largely overlap. The East African States were also party to the 1981 Treaty for the Establishment of the Preferential Trade Area for Eastern and Southern Africa (PTA), which itself was a first step toward the 1993 treaty establishing COMESA). Tanzania also belongs to SADC. Ethiopia, Kenya, Sudan, and Uganda belong to IGAD as well, whose mission is, among other things, to promote intra-regional trade and improve communications infrastructure. IGAD, however, does not seem to have at present any projects in transport and facilitation, nor has it developed any legal instrument related to transport and facilitation.

**Transport policy**

Chapter 15 of the Treaty is entitled Cooperation in Infrastructure and Services and covers transport. Common transport policies are the subject of Article 89. The Partner States undertake “to evolve coordinated, harmonized and complementary transport and communications policies… [and] to improve and expand existing links and establish new ones.”

To this end, the Partner States shall take steps to

- Develop harmonized standards and regulatory laws, procedures, and practices
- Construct, upgrade, and maintain facilities
- Review and redesign intermodal transport systems and develop new routes.
- Grant special treatment to landlocked countries
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Altogether, the EAC Treaty is the most detailed of all African cooperation treaties in the areas of Transport and Communications.

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*Article 91.* Rail transport is to be coordinated and new lines constructed where necessary. Railways would be made more efficient by developing their managerial autonomy. Documentation, packaging, procedures, standards, etc. would be harmonized, and tariff discrimination would be eliminated.

*Article 92.* Civil aviation policies would be harmonized and joint services facilitated. Efforts would be undertaken to make air transport services safe, efficient, and profitable through autonomous management. The 1944 Chicago Convention on International Civil Aviation would be implemented, flight schedules coordinated, and ICAO policies and guidelines on the determination of user charges applied. Rules and regulations related to scheduled air transport would be the same in all Partner States.

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access to port facilities and opportunities to participate in the provision of port and maritime services. The Member States would agree to charge nondiscriminatory tariffs on goods from their territories and from other Member States except where their goods enjoy domestic transport subsidies and apply the same rules and regulations in respect of maritime transport among themselves without discrimination.

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Common Market (Article 76). A protocol shall be issued on a Common Market among the
Partner States. Within the Common Market, there is to be free movement of labor, goods, services, and capital, and the right of establishment. The Common Market Protocol was signed in November 2009 and ratified in 2010 by all the States party to it.

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2. Bas Congo Corridor: complete route from Mombasa to Banana (Democratic Republic of the Congo) with various options to connect the eastern Democratic Republic of the Congo with the Atlantic Ocean.

**Air transport**

The EAC Civil Aviation Safety and Security Oversight Agency (CASSOA) started operation on 1st June 2007, as an autonomous self-accounting body of the East African Community following the signing of the establishing Protocol by the three founder Partner States on 18th April 2007 and was formally established on 18th June 2007 during the 5th Extraordinary Summit of EAC Heads of State held in Kampala Uganda.

**Inland waterway transport**

The Protocol establishing the Lake Victoria Basin Commission (LVBC) was signed on November 29, 2003, and ratified in December 2004. The current coordination arrangements involve the Minister of water of Burundi, the Minister of natural resources of Rwanda, and Ministers of water/mineral resources of Kenya, Tanzania, and Uganda.

**Customs**

The revised version of the 2009 East African Community Customs Management Act incorporates all amendments concluded to December 2008. The Protocol on the Establishment of the East African Customs Union deals mainly with the technical and regulatory aspects of the union (Articles 6 to 8). As of 2010, there were still many challenges affecting implementation of the Customs Union such as lack of an efficient coordination and monitoring system at the local and regional levels. There were also some conflicting interests at the national and regional levels. In November 2009, the Member States signed the Common Market Protocol and ratification, followed in 2010 by all the Partner States.
East - Southern Africa

9 Common Market for Eastern and Southern Africa (COMESA)

The Treaty establishing a Common Market for Eastern and Southern Africa (COMESA) was signed in Kampala, Uganda in November 1993. It replaced the 1981 Preferential Trade Area (PTA) Agreement signed in Lusaka (Zambia) with the objective to transform the Preferential Trade Area into a common market.

The Treaty also refers to Article 18 (1) of the 1991 Abuja Treaty establishing the African Economic Community. COMESA is therefore the ultimate stage in a process of economic and social integration “The aims and objectives of the Common Market by promoting a more balanced and harmonious development of its production and marketing structures” (Article 3).

“In order to promote the achievements of the aims and objectives of the Common Market, the Member States shall:

In the field of trade liberalization and customs co-operation:

a) establish a customs union, abolish all non-tariffs barriers to trade among themselves; establish a common external tariff, cooperate in customs procedures and activities; (b) adopt a common customs bond guarantee scheme; c) simplify and harmonize their trade documents and procedures; d) establish conditions regulating the re-export of goods from third countries within the Common Market; e) establish rules of origin with respect to products originating in the Member states.” (Article 4 Specific undertaking).

In other word, the COMESA treaty aims at establishing a Customs union and at abolishing all non-tariffs barriers to trade and simplifying and harmonizing procedures and documentations. (See Annex for further details).

In the field of transport and communications:

a) foster such cooperation among themselves as would facilitate the production of goods and facilitate trade in goods and services and the movement of persons; b) make regulations for facilitating transit trade within the Common Market; c) adopt a Third Party Motor Vehicle Insurance Scheme. (Article 4 Specific Undertakings)

In regard of Transportation,

“the Member States undertake to evolve coordinated and complementary transport and communications policies as a mean of furthering the physical cohesion of the Member States so

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3 South Africa, a member of the Southern African Development Community, a regional economic organization that somewhat competes with COMESA, is not a COMESA member.
as to facilitate movements of interstate traffic and to promote greater movements of persons, goods and services within the Common Market”. (Chapter eleven art 84).

The text of the different articles on transport is given in Annex.

With the Treaty was attached two protocols one on transit trade and transit facilities, the other one the establishment of a third party motor vehicle insurance Scheme


Based on Article 4 of the COMESA Treaty, the Protocol for Transit Trade and Transit Facilities was issued also on November 1993, as an Annex 1. The main provisions of the protocol are as follows:

**Articles 2(1) and 3.** Until a common external tariff is established, all transit traffic have freedom to cross the territories of the Common Market whether from or to Partner States or from and to third countries, subject to any restriction imposed by a Partner State for the purposes of safety, public health, etc., and generally public interest.

**Article 2(3).** No import or export duty is to be levied on transit trade; rates and tariffs shall be applied without discrimination. Administrative charges may be levied.

**Articles 4 and 5.** All carriers engaged in transit traffic shall be licensed. Satisfaction of the technical conditions of the carriage shall be a condition of licensing.

**Articles 6 to 9.** Standard Common Market transit documents will be used to accompany goods in transit. Transit goods will be transported under seal. Unless there is suspicion of abuse, goods in transit shall be exempt from import or export duties, and not be subject to Customs examination at Customs offices. All transit traffic shall be covered by Customs bonds and sureties’ arrangements.

**Articles 10 and 11.** Partner States undertake to facilitate the transfer to other Partner States of the funds necessary for the payment of premiums, penalties, bonds, etc. related to transit operations.


This Protocol constitutes Annex II of the Treaty, and was concluded on March 1993 in Kampala, Uganda. It implements Article 85 of the Treaty stipulating that Partner States shall adopt minimum requirements for the insurance of goods and vehicles.

The scheme provides at least minimum guarantees like those required by the laws in force in the Partner States when an insured vehicle is transiting the territories of other Partner States (Article 2).

**Provisions**

The main provisions of the Protocol are as follows:

**Article 3.** The scheme is based on a Common Market Yellow Card is- sued by a national
bureau and handed over to motorists on the usual terms by an insurer authorized to undertake this type of business. A national bureau, composed of insurers, will settle on behalf of the insurers the claims arising from accidents caused abroad by the holders of cards they have issued and claims arising from accidents caused in its country by holders of card issued by other national bureaus.

Articles 6 and 7. Yellow Cards, proof of the existence of an insurance policy, are issued for a maximum of one year and for a specific vehicle. Notwithstanding the insurance policy under which it is issued, the Yellow Card provides all the guarantees required by law governing motor vehicle insurance in the country in which the accident occurred.

Article 18. A Council of Bureaus, meeting at least once a year, is composed of representatives of all the bureaus of the Common Market. The council orientates, coordinates, and supervises the insurance scheme established by the protocol, together with the legal, technical, and financial operations of the national bureaus. It also settles disputes between bureaus. An Inter-Bureaus Agreement determines the maximum amount for the delegation of the powers of settlement by one national bureau to another and the minimum handling fee payable for each case handled by them.

9.1 Other Measures

In line with the Protocol on Transit Trade and Transit Facilities provided in the COMESA Treaty, COMESA has developed over the years several innovative trade and transport facilitation instruments to implement the Protocol on Transit Trade and Transit Facilities:

3 COMESA Simplified Trade Regime (STR) (2012)

The Simplified Trade Regime (STR) aims at simplifying the whole process of clearing goods for small scale cross border traders by way of: i) a simplified Certificate of Origin obtainable from Customs as the trader leaves the country; ii) a common list of qualifying goods that may use the STR displayed at all border posts within COMESA; iii) a simplified Customs document (declaration form) that is filled in as the trader enters the country he is exporting to;

These documents are filled in at the border post by the trader and are stamped and certified by a customs official.

In addition, at the border is set up a “Help” or “Trade Information Desk” with a Trade Information Officer to assist traders in filling the documents and answering queries.

The STR is currently implemented in seven COMESA countries (Burundi, Kenya, Malawi, Rwanda, Uganda, Zambia and Zimbabwe).

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4 for consignments of US$1,000 or less and for goods listed on the Comesa STR Common list.
COMESA has developed a system the CVTFS which use a trade facilitation technology that provides a single electronic platform for processing various transit trade instruments, including carrier license for road freight operators, Comesa Customs Declaration Document, Comesa Regional Customs Bond Guarantee System, Comesa Certificate of overload Control, transit bonds, cargo tracking, and insurance and yellow cards among others.

Approved by the Comesa Council of Ministers in 2012, it will replace existing practices by allowing all customs in the various Comesa member States to track and locate the movements of the goods and trucks while in transit through different corridors.

The system will be accessible to customs, freight forwarders, insurance companies, banks, port authorities, container freight stations and traders among others. This initiative is line with the provision of the COMESA Treaty.

The pilot of CVTFS has officially begun in the Northern Corridor consisting Kenya, Uganda, Rwanda and DR Congo is now fully functional. Preparations are also underway to extend the pilot to North –South corridor comprising Malawi, Zambia and Malawi.

5 COMESA Regional Customs Transit Guarantee (RCTG-CARNET)

The COMESA Regional Customs Transit Guarantee (RCTG-CARNET) commonly known as the Carnet is a Customs transit guarantee scheme that ensures that Customs in a transit country receive proper payment for dues and duties for any goods in transit under customs seals in the Comesa region improperly discharged.

The core element of any transit system is a mechanism to guarantee the transit country that either the goods will indeed leave the country without being put illegally on the market, or that the corresponding taxes and excises are paid if ever evidence of the goods leaving the country cannot be produced.

It is an Insurance Bond or a Bank Guarantee issued by Sureties, on behalf of the Principals to Customs Administration to cover any loss of revenue when Goods are transiting in the COMESA Region. It is designed to fast-track movement of goods under Customs seals in the Comesa region. The Scheme is a component of the COMESA Protocol on Transit Trade and Transit Facilitation, Annex I of COMESA Treaty.

The RCTG Scheme matters a great deal particularly to landlocked countries in the reduction of transit and transport time and increasing efficiency in the removal, movement and clearance of Transits goods in the region.

Countries that are not implementing the scheme require transit goods transporters to take out a customs bond at least equal to the duty which would be payable on their cargo.
The Member States that are party to the RCTG Scheme are twelve (13) countries, namely: Burundi, Djibouti, DR Congo, Ethiopia, Madagascar, Malawi, Kenya, Rwanda, South Sudan, Sudan, Tanzania, Uganda and Zimbabwe.

The RCTG was introduced in 2012 on the Northern Corridor to facilitate movement of goods from the port of Mombasa to the landlocked countries in the region. Uganda, Kenya and Rwanda have taken the lead in using the regional Customs bonds scheme of Comesa⁵.

Central Corridor: Tanzania started issuing RCTG Carnet in July 2015. Burundi will commence operations soon.

North-South Corridor (“Dar Corridor”): DR Congo signed the Inter-Surety Agreement on 10th July 2015 and has started the preparations to commence the operations of the Scheme. Malawi and Zimbabwe are ready to implement the Scheme. Zambia: engagement with the Government stakeholders is at advanced stage.

Djibouti Corridor (Djibouti, Ethiopia & Sudan): Preparations for the commencement of operations are ongoing.

The bond has enhanced competitiveness for companies on the Northern Corridor.

A June 2014 WTO study on Comesa’s RCTG shows that the implementation of the RCTG Carnet reduces the cost of transit trade and transport between 10 and 15 per cent.

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<table>
<thead>
<tr>
<th>Northern Corridor - RCTG</th>
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<tbody>
<tr>
<td>The Customs bonds scheme found an uptake in Kenya, Uganda and Rwanda after the rollout of the East African Community Single Customs Territory (SCT) early this year. Under the SCT clearance of imports, tax assessment and collection is done at the first port of entry. A Studies indicate that under the East African Community Single Customs Territory (SCT) early this year; that transit time from Mombasa to Kigali used to take 21 days or more, but has reduced since the introduction of the SCT.</td>
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<tr>
<th>RCTG IMPACTS ON TRANSIT TIME</th>
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<tr>
<td>According to some other reports from COMESA, it was observed that trucks in possession of the RCTG spend no more than 30 minutes on both sides of the border post in contrast to an average of two days for trucks that are not in possession of a single regional transit customs bond guarantee which can be issued by any country. In addition, approximately $500 was incurred as the cost of waiting time at border posts which is then included in the freight rate paid by importers and exporters. “A three day delay in clearing a transit truck at a border post added a cost of US$1,500 to the cost of doing business,” the SG said. “The implementation of the RCTG aided by a Virtual Trade Facilitation System (CVTFS) that integrates all trade documents and different customs authorities in real time on the basis of a</td>
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</table>

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⁵First fixed initially at 0.75 per cent, the Comesa bond is now at 0.5 per cent on the North corridor. .
single sign on would significantly reduce trade costs and enhance the competitiveness of economies.”

Source: June 2014 WTO study on Comesa’s RCTG

Southern Africa

10 SADC

The Southern African Development Community was founded in 1992, evolving from the Southern African Development Coordination Conference (SADCC). The Windhoek Treaty for the creation of SADC was concluded at Windhoek, Namibia, on August 17, 1992.

Out of the 15 SADC Member States, 8 are also members of Comesa, while one country belongs also to EAC. The seat of SADC is at Gaborone. SADC may appear to be overlapping with the Common Market for Eastern and Southern Africa (COMESA) created in 1993, one year after the Treaty establishing SADC. So far, SADC has resisted the efforts deployed to convince its members to merge the two institutions.

SADC objective is more ambitious than a Customs union but less than an economic union. Harmonization is the leading word rather than unification. Each Member State retains its autonomy, and decisions at the top are reached by consensus. Its economic objectives are as follows:

- Achieve development and economic growth.
- Promote self-sustaining development.
- Achieve complementarities between national and regional strategies and programs.
- Develop policies for a progressive elimination of obstacles to the free movement of capital, labor, goods, and services among Partner States.
- Coordinate, harmonize, and rationalize sector strategies, policies, programs, and projects in the areas of cooperation, especially infrastructure and services.

1996 The SADC Protocol on Transport, Communications and Meteorology

The SADC Protocol on Transport, Communications and Meteorology signed by the Heads of State and Governments in August 1996 has entered into force.

Member States’ general is to establish transport, communications and meteorology systems which provide efficient, cost effective and fully integrated infrastructure and operations, which best meet the needs of customers and promote economic and social development while being environmentally and economically sustainable. (Article 2.3) It states as the main Strategic Goals (Article 2.4):
“Integration of regional transport, communications and meteorology networks to be facilitated by the implementation of compatible policies, legislation, rules, standards and procedures, elimination or reduction of hindrances and impediments to the movements of persons, goods, equipment and services”. They include:

- the right of freedom of transit for persons and goods, the right of landlocked States to unimpeded access to and from the sea
- the development of simplified and harmonized documentation which supports the movement of cargoes along the length of the logistical chain, including the use of a harmonized nomenclature

**The corridor concept**

At an early stage, SADC developed the transport corridor concept in order to compete with South Africa. These corridors therefore originated as politically motivated policies with which sources of international finance were in fact associated.

According to the Protocol, a corridor is “a major regional transportation route along which a significant proportion of Partner States or non-Partner States regional and international imports and exports are carried by various transport modes” (Article 1.1). Seven such corridors are identified and were agreed to conform to the definition of the protocol, as presented in table 3.

**Objectives (Article 3)**

The aim of the Protocol is to establish transport systems that provide efficient, cost-effective, and fully integrated transport infrastructure, policy, and operations. The main aspects of the policy are to:

- Develop complementarities between modes and encourage the provision of multimodal services.
- Establish infrastructural, logistical, institutional, and legal frameworks, including the right of transit and the right of landlocked countries to unimpeded access to the sea and equal treatment of nationals from different member countries.
- Establish cross-border multimodal corridor planning committees’ composed of public and private participants.

**Road Infrastructure (Article 4)**

The Partner States agree to:

- Ensure and sustain the development of an adequate road network.
- Adopt a common definition of the Regional Trunk Road Network serving as a basis for a coordinated plan for the construction and development of roads.
- Establish autonomous road authorities representative of the public and private sectors.
for overseeing, regulating, and managing the roads and the effective utilization of funding of roads.

- Develop a policy of funding resources, ensuring that road users contribute to the full cost of maintaining and providing the roads.
- Harmonize technical standards.

**Road transport (Article 5)**

The Partner States agree to:

- Facilitate the flow of goods and passengers by promoting the development of a strong and competitive commercial road transport industry.
- Liberalize their market access policies on the cross-border carriage of goods, with the objective of all reaching the same degree of liberalization, through bilateral and multilateral agreements between states addressing the need for single SADC carrier permits or licenses, quota systems, and the establishment of bilateral or multilateral road transport route management groups.
- Develop harmonized transport law enforcement, harmonized safety standards, third-party insurance, training and testing of drivers, etc.
- Cooperate to develop and implement a coordinated regional traffic quality management plan to improve road traffic safety, protect the road infrastructure, exchange and transfer technology with the establishment of a regional coordinating body comprising representatives of all executive law enforcement authorities responsible for roads, and initiate traffic management and control for implementing and managing a harmonized road traffic quality management plan.
  - Conduct environmental controls.
  - Develop road traffic information systems.

**Railways (Article 6)**

The Partner States agree to:

- Facilitate the provision of efficient railways.
- Formulate a policy for institutional restructuring of the railways, granting autonomy to their management and increasing private sector involvement in railway investment.
- Create an integrated regional network of railway corridors with common standards for customer service and promotion of data information exchange.
- Develop harmonized and simplified procedures and documents as well as a common freight nomenclature to establish a single railway invoicing system.
- Design compatible technical and equipment standards.
- Establish Railway Route Management Groups to support the activities of regional railways and the Corridor Planning Committees.
Maritime and inland waterway transport (Chapter 8)

In the area of maritime and inland waterways, the objective is to formulate a harmonized policy and collectively develop a common understanding of the net benefits of common shipping and port policy with possible redistribution effects among Partner States. Cooperation and development of common standards in the areas of hydrographic works, chart making, ship standards, seamen's conditions, environmental protection, marine communications, and training of personnel should also be considered.

Evaluation

There is a consensus that SADC works. The launch of the SADC Corridor Development Strategy confirms the existence of a regional commitment to infrastructure development. Several transport and transit facilitation projects are ongoing.

The expansion and modernization of the Walvis Bay Port and the Angola and Zambia Agreement on a plan to expand the existing rail line between the two countries are two examples demonstrating that SADC Member States have understood the strength of coming together for their common economic development, and that they have also realized that this development cannot be made without developing the transit and transport facilitation routes and tools.

The 2001 SADC-Regional Indicative Strategic Development Plan (RISDP)

by the Secretariat to provide a “clear vision and a strategic direction with respect to SADC programs and activities (...) and to align the strategic objectives and priorities of SADC with the policies and strategies for achieving its long term goals”. The purpose of the RISDP is to deepen regional integration in SADC.

The RISDP emphasizes co-operation in infrastructure development in order to ensure the availability of a sufficient, integrated, efficient and cost effective infrastructure that will support and sustain regional economic development, trade, agriculture and contribute towards poverty eradication. The strategies for achieving this goal include for Transport and Communications, reducing capital, maintenance and operating costs and policy harmonization and liberalization of markets in all forms of transport.

Regional Infrastructure Development Master Plan-Transport Sector Plan (RIDMP- TSP);

The SADC Strategy is guided by a fifteen (15) year plan, the Regional Indicative Strategic Development Plan (RISDP). The plan contains detailed milestones, target outputs and responsibilities for the first five years of the fifteen year plan. This five year plan is broken down further into annual plans to guide the first implementation phase. Amongst others, the main areas of focus include development, construction, maintenance and rehabilitation of regional infrastructure networks through the implementation of Short Term Action Plan 2012-2017 of the RIDMP which includes the establishment of regional institutions and frameworks in transport corridors, as well as regional regulatory oversight organization. The Strategy also include project preparation to ensure availability
of bankable projects and promote strengthening of Public and Private Partnerships (PPPs) initiatives for infrastructure development.

The 2008 SADC Spatial Corridor Initiative (SADC-SDI) Strategy

The SADC launched Spatial Corridor Initiative (SADC-SDI) Strategy in 2008 which ushered in a new direction of an integrative approach of corridor development encompassing institutional, policy and regulatory frameworks as well as infrastructure planning. The achievement of this critical milestone accelerated the conceptualization of regional SADC Regional Corridors and the subsequent consultation processes which concretized the SADC Corridor Programme which currently constituted by eighteen (18) corridor out of the twenty two (22) ESA corridors. The strategic approach for ESA corridors continues to be guided by SDI Framework.

The strategic objectives of the SDI are to i) Increase the rate of regional and national economic growth and development; ii) Enhance levels of economic integration of the SADC economies; iii) Promote greater complementarities in economic strategies between SADC states to ensure competitive structures of production in the region and increase international competitiveness of SADC export goods especially for landlocked countries; iv) Enhance intra-regional trade in order to address historic imbalances; v) Mobilise flows of foreign direct investments; vi) Promote more equitable spatial location of industries and agro-industries.

The 2012 SADC PPP Regional Framework

The PPP Regional Framework has been drafted based on “the recognition that Public Private Partnerships (PPPs) are an important source of procurement for delivery of infrastructure assets and public services across the Southern African Development Community (SADC)”

SADC Member States recognize PPPs as complex instruments that require solid and transparent policies, strong institutional and regulatory bodies with capacities to be in place and proper legislative frameworks.

The SADC PPP Regional Framework:

- provides a comprehensive set of recommendations for SADC Member States concerning the adoption of a common regional PPP Framework relying on lessons learned from the review of other countries’ PPP policies, institutional settings as well as the legal issues and individual implications for SADC Member States.
- embodies important principles and guidelines agreed upon in the Steering Committee concerning PPP Frameworks for SADC Member States developed as a common point of departure for all those institutions, public bodies and entities involved in the implementation and promotion of PPPs.
- serves SADC Member States to follow at national level the principles laid out in this document in order to have a unified and harmonized approach towards the implementation of PPP
policies, the establishment of the framework concerning PPP institutional and legal structures across the SADC region

11 The COMESA EAC SADC TRIPARTITE

The Tripartite is an umbrella organization consisting of 3 of Africa’s Regional Economic Communities, namely: the Common Market for Eastern and Southern Africa; the East Africa Community and the Southern African Development Community. The Tripartite comprises 26 Member countries from Cape Town to Cairo with a combined population of nearly 600 million people and a total Gross Domestic Product (GDP) of approximately US$1.0 trillion.

The COMESA-EAC-SADC Tripartite was established in 2006 with the main objective of strengthening and deepening economic integration of the southern and eastern Africa region. This is to be achieved through a number of initiatives aimed at harmonising policies and programmes of the three RECs in the areas of trade, customs and infrastructure development, and implementing these in a coordinated manner, and wherever possible jointly.

The Tripartite framework has presented an opportunity for the REC’s to collaborate on programming of interventions in trade and transport facilitation and create coordination mechanism for joint implementation of projects at regional level and along transport corridors, in such a way that the interventions reinforce each other and contribute to the overall objective of reducing the costs associated with transit movements in the eastern and southern Africa region.

The main objective of the COMESA-EAC-SADC Tripartite is strengthening and deepening economic integration of the southern and eastern Africa region. This will be achieved through harmonisation of policies and programmes across the three Regional Economic Communities (RECs) in the areas of trade, customs and infrastructure development.

2008 Tripartite Summit held on October 2008, in Kampala, Uganda. The Tripartite Summit gave political endorsement and direction to the process of cooperation and harmonization.

2009 North–South Corridor Aid for Trade Programme

One of this program is pilot transport corridor programme, the North-South Corridor Aid-for-Trade Programme, which aims to improve the reliability of transport corridors through addressing infrastructures constraints and operational inefficiencies, improvements in policies and procedures, corridor institutional development and the promotion of coordinated approaches to planning, programming, and financing.

The NSC Aid for Trade road network includes the road corridors defined by SADC as the North-South Corridor (NSC), the Dar es Salam corridor and segments of the trans-kalahari and Nacala Corridors.
This road network spans 8 countries, 3 RECs, and a total of 10,647 km of road. This road network is the busiest transport network in the Tripartite region in terms of both traffic and freight volumes. Approximately 95% of all imports and exports transported along the NSC Aid-for-Trade network are transported by road, and only 5% by rail.

The North South Corridor Aid for Trade Programme presents a regional approach to the development and rehabilitation of surface transport infrastructure along transport corridors – which differ fundamentally from traditional, national approaches to project planning and implementation in the following ways:

The NSC Aid for Trade programme:

a) Combines investment in infrastructure with programme addressing trade facilitation and trade and transport regulations between countries;

b) Take a holistic approach to transport system planning and maintenance across national boundaries (covering rail, road and port links, border posts and the movement of goods between them)

c) Works with multiples stakeholders including RECs, national governments, private sector and multilateral and bilateral donors;

d) Seeks a progressive approach to financing that reflects both public good and commercial interest (based on economic returns).

2011 COMESA-EAC-SADC Declaration to establish a Free Trade Area.

On June, 2011, the Heads of State and Government of the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Southern African Development community (SADC) met and signed a declaration launching negotiations for the establishment of the COMESA-EAC-SADC Free Trade Area.

They endorsed the Tripartite Vision and Strategy to improve the economic and social welfare of the citizens of the COMESA-EAC-SADC region through the promotion of regional economic growth by establishing a Tripartite Free Trade Area to bolster intra-regional trade through the creation of a wider market, increased investment flows, enhanced competitiveness and development of cross-regional infrastructure.

The three main pillars of the Tripartite Strategy are as follows:

- market integration based on the Tripartite Free Trade Area (FTA);
- infrastructure development to enhance connectivity and reduce costs of doing business; and
- industrial development to address productive capacity constraints.

In addition, the Tripartite Summit signed a Declaration and adopted the negotiation Principles, Processes and Institutional Framework for launching negotiations for the
establishment of the COMESA-EAC-SADC Free Trade Area (FTA).

**2011 Comprehensive Tripartite Transport and Trade Facilitation Programme (CTTTFP)**

A Comprehensive Tripartite Transport and Trade Facilitation Programme (CTTTFP) was also developed to be implemented as a common programme first along corridors and then throughout the RECs.

The CTTTFP has customs harmonisation and transport harmonisation elements as follows:

i. *Customs Tariff Nomenclatures and Statistical Nomenclatures*: The Tripartite is harmonising the classification of the Harmonized System (HS) Code to ensure that the Tripartite Free Trade Area can operate in the most efficient way.

ii. *Customs and Legislative Procedures*: Agreement that trade and customs legislation and procedures should be based upon international instruments and standards Convention on the Simplification and Harmonization of Customs Procedure, based on international best practices.

iii. *Efficient management of border posts*: A major pillar of the co-operation programme among SADC, EAC and COMESA Member States is the adoption of Coordinated Border Management principles at the major border crossings and on-going works to establish one-stop border posts where appropriate.

iv. *Single Administrative Customs Document*: The Tripartite Task Force has mandated work on a harmonised Single Administrative Customs Document for the three RECs. The three RECs are also standardizing customs co-operation provisions for the exchange of information on changes in customs legislation, procedures and duties and information on regulatory requirements and information required to implement and administer Rules of Origin.

v. *Preservation, Investigation and Suppression of Customs Offences*: The Tripartite is developing legislation that will facilitate the exchange of intra-regional and inter-regional trade information amongst customs administrations.

vi. *Harmonisation of Third Party Motor Vehicle Insurance Schemes*: A regional team has been established and tasked to harmonise the third party vehicle insurance schemes and to determine benefits if the Yellow Card Scheme and the Fuel Levy system applied in some of the eastern and southern Africa countries were to be harmonised.

vii. *Design and implementation of a harmonised Regional Customs Bond*: Both SADC and COMESA have developed regional customs bond guarantee systems that allow transporters to take out a single bond covering the entire trip. The challenge is to take the best of each of these systems and merge them into one system for the benefit of the entire region.

viii. *Harmonising and Enforcing Axle Load and Vehicle Dimension Limits*: Unless the
problem of overloaded axles and gross vehicle masses is positively addressed and resolved, initiatives to improve the efficiency of the region’s road transport systems will not be sustainable.

A proposed list of activities under this initiative will be undertaken.

i. **Implementation of the harmonised Road User Charges regime:** Efforts are underway to harmonise regional road user charges.

ii. **Harmonisation of commercial vehicle truck driver immigration requirements and regulations:** There are different regulations in existence in different countries in the Tripartite region as regards immigration requirements and regulations for truck drivers driving vehicles registered in other countries and the aim is to reach consensus on a common treatment of such drivers.

iii. **Implementation of corridor monitoring system for selected border posts:** The Tripartite will develop and implement a corridor monitoring system that will, where appropriate, be based on existing monitoring systems. The monitoring system will, primarily, monitor the time taken and reasons for delays along a corridor.

**Establishment of COMESA-EAC-SADC Free Trade Area**

On June 12, 2011, the Heads of State and Governments of the Tripartite, met in Charm el Cheik in Egypt and signed a Declaration launching negotiations for the establishment of the COMESA-EAC-SADC Tripartite Free Trade Area (TFTA). Twenty-six countries are to strengthen and deepen economic integration.

The TFTA agreement is made up of 45 Articles and 10 Annexes. Tariff liberalization, disciplines on non-tariff barriers, rules of origin, trade remedies and provision for dispute settlement lie at the core of what was agreed. Other provisions include elimination of quantitative restrictions, customs cooperation, trade facilitation, transit trade, infant industries, balance of payments, etc, consistent with obligations under the WTO and international best practices.
### Annexes

#### 1. Dates of Treaties Establishing RECs & SECs

<table>
<thead>
<tr>
<th>REC/SEC</th>
<th>Treaty Details</th>
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<tbody>
<tr>
<td>ECOWAS</td>
<td>1975 Lagos Treaty followed by the revised 1993 Cotonou Treaty</td>
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<tr>
<td>UEMOA/WAEMU</td>
<td>1994 Treaty followed by the revised 2003 Dakar Treaty</td>
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<tr>
<td>ECCAS</td>
<td>1983 Libreville Treaty</td>
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<tr>
<td>CEMAC</td>
<td>1994 N’Djamena Treaty</td>
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<td>EAC</td>
<td>1999 Arusha Treaty followed by the revised 2007 Treaty</td>
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<td>COMESA</td>
<td>1993 Kampala Treaty</td>
</tr>
<tr>
<td>SADC</td>
<td>1992 Windhoek Treaty amended in August 2001</td>
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<tr>
<td>SACU</td>
<td>1989 Pretoria Treaty followed by October 2002 Agreement</td>
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</tbody>
</table>
2. Member States Belonging to Each REC & SEC

<table>
<thead>
<tr>
<th>WEST AFRICA</th>
<th>CENTRAL AFRICA</th>
<th>EASTERN &amp; SOUTHERN AFRICA</th>
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<tbody>
<tr>
<td>ECOWAS</td>
<td>UEMOA</td>
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</table>

*CAR Central African Republic

** DRC Democratic Republic of the Congo
MODULE 9 REVIEW OF THE RECS ACTIVITIES IN WEST, CENTRAL, EAST AND SOUTHERN AFRICA

Module 9.2 Strengthening RECs in the transport sector in East and Southern Africa

By Judith Nwako

Table of Contents

Acronyms ....................................................................................................................................... 3
1 RECs Review .................................................................................................................................. 5
2 Assessment of RECs Current Role in the Transport Sector ......................................................... 6
3 Key Policy Instruments Guiding Role of RECs in the Transport Sector .................................... 7
3.1 Treaties and Protocols .............................................................................................................. 7
1 Agreement Establishing IGAD 1996 .............................................................................................. 7
3.2 Bilateral/Multilateral Instruments .............................................................................................. 7
3.3 Key Strategic Documents .......................................................................................................... 8
4 RECs Areas of Intervention in the Transport Sector .................................................................... 9
4.1 Improve intermodal efficiency along the transport corridors .................................................. 9
5 Harmonization and Enforcement of Transport Regulations, Standards and Procedures ...... 12
6 Facilitate transit traffic and border procedures ........................................................................ 14
7 Achievements/ Shortcomings and Strengths/ Weakness ............................................................ 16
7.1 Achievements and Short Comings .............................................................................................. 16
7.2 Strength & Weakness .................................................................................................................. 18
8 Institutional Relations ................................................................................................................ 20
8.1 Associations ............................................................................................................................... 20
8.2 Corridor Institutions .................................................................................................................. 21
8.3 Member States ........................................................................................................................... 22
8.4 Donor Communities and International Funding Organizations .............................................. 23
9 Organizational Review & Human Resource Needs .................................................................... 24
9.1 COMESA Unit ............................................................................................................................ 24
9.2 EAC- Transport Unit .................................................................................................................. 25
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AASA</td>
<td>Airlines Association of Southern Africa</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>ASANRA</td>
<td>Association of National Road Agencies</td>
</tr>
<tr>
<td>CAAs</td>
<td>Civil Aviation Authorities</td>
</tr>
<tr>
<td>CAC</td>
<td>Civil Aviation Committee</td>
</tr>
<tr>
<td>CARNET</td>
<td></td>
</tr>
<tr>
<td>CASSOA</td>
<td>Civil Aviation Safety and Security Oversight Agency</td>
</tr>
<tr>
<td>CCTTFP</td>
<td>Central Corridor Transit Transport Facilitation Project</td>
</tr>
<tr>
<td>CFTA</td>
<td>Continental Free Trade Area</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
</tr>
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<td>CRIDF</td>
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<tr>
<td>CTTFP</td>
<td>Comprehensive Trade and Transport Facilitation Programme</td>
</tr>
<tr>
<td>CU</td>
<td>Customs Union</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>ECA</td>
<td>Economic Commission for Africa</td>
</tr>
<tr>
<td>ESA</td>
<td>East and Southern Africa</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FESARTA</td>
<td>East and Southern Africa Road Transport Associations</td>
</tr>
<tr>
<td>FRRFA</td>
<td>Federation of Regional Road Freight Association</td>
</tr>
<tr>
<td>FSWG</td>
<td>Flight Safety Working Group</td>
</tr>
<tr>
<td>FTA</td>
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</tr>
<tr>
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<td>International Civil Aviation Organisation</td>
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<tr>
<td>ICD</td>
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</tr>
<tr>
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<td>Inland Container Terminal</td>
</tr>
<tr>
<td>ICP</td>
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</tr>
<tr>
<td>IGAD</td>
<td>Intergovernmental Authority for Development</td>
</tr>
<tr>
<td>IOC</td>
<td>Indian Ocean Commission</td>
</tr>
<tr>
<td>JCA</td>
<td>Joint Competition Authority</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>MCLI</td>
<td>Maputo Corridors Logistic Initiative</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa Development</td>
</tr>
<tr>
<td>NSC</td>
<td>North-South Corridor</td>
</tr>
<tr>
<td>ORTI</td>
<td>Oliver Tambo International Airport</td>
</tr>
<tr>
<td>OSBPs</td>
<td>One Stop Border Post</td>
</tr>
<tr>
<td>PIDA</td>
<td>Programme for Infrastructure Development of Africa</td>
</tr>
<tr>
<td>PIP</td>
<td>Priority Investment Plan</td>
</tr>
<tr>
<td>PIU</td>
<td>Project Implementation Unit</td>
</tr>
<tr>
<td>PMAESOA</td>
<td>Port Management Association of East and Southern Africa</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>PPIU</td>
<td>Project Preparation and Implementation Unit</td>
</tr>
<tr>
<td>PPPs</td>
<td>Public and Private Partnerships</td>
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<tr>
<td>RCTG</td>
<td>Regional Customs Guarantee</td>
</tr>
<tr>
<td>REC</td>
<td>Regional Economic Communities</td>
</tr>
<tr>
<td>RIDMP</td>
<td>Regional Infrastructure Development Master Plan-</td>
</tr>
<tr>
<td>RISDP</td>
<td>Regional Indicative Strategic Development Plan</td>
</tr>
<tr>
<td>RSDP</td>
<td>Road Sector Development Programme</td>
</tr>
<tr>
<td>SACU</td>
<td>Southern African Customs Union</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SADCC</td>
<td>Southern African Development Coordination Conference</td>
</tr>
<tr>
<td>SARA</td>
<td>Southern African Railway Association</td>
</tr>
<tr>
<td>SARPs</td>
<td>Standards and Recommended Practices</td>
</tr>
<tr>
<td>SDI</td>
<td>Spatial Corridor Initiative</td>
</tr>
<tr>
<td>SPVs</td>
<td>Special Purpose Vehicles</td>
</tr>
<tr>
<td>TKR</td>
<td>Trans Kalahari Corridor</td>
</tr>
<tr>
<td>TRIPS</td>
<td>Information Platform and Systems</td>
</tr>
<tr>
<td>TSP</td>
<td>Transport Sector Plan</td>
</tr>
<tr>
<td>TTA</td>
<td>Tripartite Trust Account</td>
</tr>
<tr>
<td>VTFS</td>
<td>Virtual Trade Facilitation System</td>
</tr>
<tr>
<td>YD</td>
<td>Yamoussoukro Decision</td>
</tr>
</tbody>
</table>
1 RECs Review

The Eastern and Southern Africa (ESA) region is constituted by a total of twenty eight (28) countries who are in turn constituents of four (4) RECs namely; Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC), Southern African Development Community (SADC) and Intergovernmental Authority for Development (IGAD) as shown on table 1.1 below. The other institutions in this regional block include the Indian Ocean Commission (IOC) and Southern African Customs Union (SACU).

<table>
<thead>
<tr>
<th>COMESA</th>
<th>EAC</th>
<th>IGAD</th>
<th>SADC</th>
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<tbody>
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<td>Comoros</td>
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<td>D.R. Congo</td>
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<td>D.R. Congo</td>
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<td>Djibouti</td>
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<td>Eritrea</td>
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Table 1.1. ESA Regional Economic Communities

COMESA evolved from the Preferential Trade of East and Southern Africa in 1994 and comprise 19 member states of which eight (8) are also members of SADC while four (4) are members of EAC. The EAC was re-established in 2000 and within the 5 EAC countries, 4 countries are members of COMESA and only one state is also a member of SADC. SADC was founded in 1992 evolving from the Southern African Development Coordination Conference (SADCC) and out of the 15 SADC
Member States, 8 countries are members of COMESA while one country belongs to the EAC. COMESA launched its Free Trade Area (FTA) and Customs Union (CU) in 2000 and 2009 respectively. The operationalisation of the CU is pending completion of facilitatory arrangements. EAC is now at the CU stage. Five member states of SADC are members of the oldest CU in Africa, the Southern African Customs Union (SACU).

2 Assessment of RECs Current Role in the Transport Sector

The RECs have a crucial role of undertaking, strategic planning, management and monitoring of programmes as espoused under Article 14 of the SADC Consolidated Treaty; Article 71 -1(c) of the EAC Treaty and Article 12 -2 (d) of the IGAD Treaty. Their specific roles in the transport sector is carried under the relevant protocols; Article 2.3 of the SADC Protocol on Transport, Communication and Meteorology- Article 4 of COMESA –Trade and Transit Facilities; Article 6 of the EAC Protocol on the Establishment of the East African Customs Union. The general objective of these protocols is to establish transport systems which provide efficient, cost-effective and fully integrated infrastructure as well as trade and transit traffic facilitation.

The role and responsibility of RECs on specific modes (road, rail, air, and inland water ways) of transport is guided by relevant clauses and articles of the protocols. COMESA focus is largely on trade and transit facilitation along the corridors and Article 3 of the Protocol on Transit Trade and Transit Facilities provides the overall scope in this regard. The SADC Protocol Chapters 5,6,7,8, and 9; articulates the requirements of Road Transport, Road Traffic, Railways, Maritime and Inland Waterway and Civil Aviation respectively with regard to policy, legal regulatory as well as infrastructural developments. EAC Treaty; Articles 90 to 94 provides guidance on Road and Rail Transport, Civil Aviation and Civil Air Transport and Maritime and Ports, and Inland Waterways Transport. Multimodal Transport provisions are carried under Article 95.

Principally, the role of RECs as guided by the provisions of the Treaties and Protocols, is to develop policy, legal and regulatory transport frameworks; which instruments will facilitate the achievement of the objectives of Member States focused towards the development of an efficient and reliable transport system, characterised by a well-developed multimodal services provisions.

RECs continue to deliver on their strategic objectives in a collaborative manner in the development of policy, legal and regulatory frameworks as well as facilitation, and establishment of the enabling environment across the regions.
3 Key Policy Instruments Guiding Role of Recs in the Transport Sector

3.1 Treaties and Protocols

All the four RECs have ratified instruments in the form of Treaties establishing the institutions however the IGAD was established by an Agreement as shown on table 2.1 below. The development of Protocols is instructed by specific provisions of the Treaties such as Article 17 of the IGAD Agreement and Article 22 of the SADC Consolidated Treaty.

<table>
<thead>
<tr>
<th>Protocol</th>
<th>COMESA</th>
<th>EAC</th>
<th>IGAD</th>
<th>SADC</th>
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</table>

Table 2.1. Treaties and Protocols

These instruments express Member States commitment towards the obligatory implementation of sectoral programmes and reflect the provisional areas where cooperation will be undertaken with regard to legal, legislative and policy harmonisation, and modalities of implementation for example; Article 2.4 SADC Transport Protocol provides a Strategic direction on the approaches for policies and integrated network development and Article 3 of COMESA Transit Protocol defines the Scope and puts thrust on the transit trade and traffic procedures and market access requirements.

3.2 Bilateral/Multilateral Instruments

Some of the key deliverables and outcomes of the Treaties and Protocols are evidenced by numerous instruments in the form of Bilateral and Multilateral Agreements signed by Members States across the ESA Region to facilitate their ambitions on infrastructural development as well as trade and transit traffic facilitation. These instruments bind the participating states and their agencies to jointly plan, mobilise resources and implement projects. The number of bilateral and regional multilateral agreements has increased significantly over the last decade and has had a substantial impact towards the build up to regional integration mainly because of the short processes of consultation and consequently the fast tracked institutional arrangements and resource mobilisation.
3.3 Key Strategic Documents

For the past five years, the COMESA overall programme was guided by the 2011-2015 Medium Term Strategic Plan. The Overall Goal directed to transport is espoused under Item 4.2 of the Plan; to “create a fully integrated and internationally competitive regional economic community within the Tripartite Framework and it is driven by a strategic goal to achieve the status of an operational Common Market within the Tripartite Framework. This goal is supported by six (6) Strategic Priorities with four (4) supporting the transport sector. COMESA focused commitment towards the Tripartite Initiative is firmed up by its domestication of the initiative within Institutional Strategic Framework.

The SADC Strategy is guided by a fifteen (15) year plan, the Regional Indicative Strategic Development Plan (RISDP). The plan contains detailed milestones, target outputs and responsibilities for the first five years of the fifteen year plan. This five year plan is broken down further into annual plans to guide the first implementation phase. Amongst others, the main areas of focus include development, construction, maintenance and rehabilitation of regional infrastructure networks through the implementation of Short Term Action Plan 2012-2017 of the RIDMP which includes the establishment of regional institutions and frameworks in transport corridors, as well as regional regulatory oversight organization. The Strategy also include project preparation to ensure availability of bankable projects and promote strengthening of Public and Private Partnerships (PPPs) initiatives for infrastructure development.

The EAC current programme is guided by the 4th Development Strategy for the period 2011/12-2015/16 which outlines broad strategic goals as well as the specific targets to be achieved during the period. The broad objective of the EAC Strategy is instructed by Article 5 of the Treaty; to develop policies and programmes aimed at widening and deepening cooperation among the Partner States and it embodies Strategic Vision Priority areas of all Member States. The Strategy will, over the next decade; 2011–2020 focus, amongst others on the establishment of a robust legal and regulatory framework, improvement and expansion of infrastructure, and increased trade with other RECs through strong and continuous support to the on-going process of creating a COMESA-EAC- SADC Grand Free Trade Area. Chapter 3.4 of the Strategy highlights the transport sector achievements and challenges during the last plan period in the; road, rail, air, inland waterways and maritime sectors.

The key documents which guide development of transport operational plans are the RECs Master Plans namely; the SADC-Regional Infrastructure Development Master Plan-Transport Sector Plan (RIDMP- TSP); COMESA-Transport and Communications Policy and Strategy and Priority Investment Plan (TSP/PIP), EAC Transport Strategy and Road Sector Development Programme (TS/RSDP) all of which are aligned to the PIDA.

The SADC launched Spatial Corridor Initiative (SADC-SDI) Strategy in 2008 which ushered a new direction of an integrative approach of corridor development encompassing institutional, policy and regulatory frameworks as well as infrastructure planning. The achievement of this critical milestone accelerated the conceptualization of regional SADC Regional Corridors and the subsequent consultation processes which concretized the SADC Corridor Programme which currently
constituted by eighteen (18) corridor out of the twenty two (22) ESA corridors. The strategic approach for ESA corridors continues to be guided by SDI Framework.

The strategic objectives of the SDI are to: Increase the rate of regional and national economic growth and development; Enhance levels of economic integration of the SADC economies; Promote greater complementarities in economic strategies between SADC states to ensure competitive structures of production in the region and increase international competitiveness of SADC export goods especially for landlocked; countries and zones Enhance intra-regional trade in order to address historic imbalances; Mobilise flows of foreign direct investments; Promote more equitable spatial location of industries and agri-industries.

4 RECs Areas of Intervention in the Transport Sector

4.1 Improve intermodal efficiency along the transport corridors

The implementation of regional transport programmes is guided by various instruments such as the comprehensive regional transport Sector Master Plans which informed the process of the PIDA. This approach forged critical linkages between the national, regional and continental programmes predominantly because RECs programmes as encapsulated in the Master-Plans have been approved by the regional structures following a rigorous consultative process. The development of the SADC-(RIDMP); COMESA-(TSP/PIP) and EAC-(TS/RSDP) was characterised by a broad-based consultative process in which Member States agreed on infrastructure projects and identified priorities.

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Port</th>
<th>Member States</th>
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</thead>
<tbody>
<tr>
<td><strong>Western Cluster</strong></td>
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<tr>
<td>Lobito/Benguela</td>
<td>Lobito</td>
<td>Angola, DR Congo, Zambia</td>
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<tr>
<td>Bas Congo</td>
<td>Matadi/Banana</td>
<td>DR Congo, Angola</td>
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<tr>
<td>Malange</td>
<td>Luanda</td>
<td>Angola, DR Congo</td>
</tr>
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<td>Namibe</td>
<td>Namibe</td>
<td>Angola, Namibia</td>
</tr>
<tr>
<td>Trans Cunene</td>
<td>Walvis Bay</td>
<td>Namibia, Angola, South Africa</td>
</tr>
<tr>
<td>Walvis Bay -Ndola-Lubumbashi</td>
<td>Walvis Bay</td>
<td>Namibia, Zambia, DR Congo</td>
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<td>Trans Kalahari</td>
<td>Walvis Bay</td>
<td>Botswana, Namibia, South Africa</td>
</tr>
<tr>
<td>Trans Orange</td>
<td>Cape Town</td>
<td>Namibia, South Africa</td>
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<tr>
<td><strong>Eastern Cluster</strong></td>
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<td></td>
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<tr>
<td>Dar es Salaam</td>
<td>Dar-es salaam</td>
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Table 3.1. East and Southern Corridors

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<th>End Point 2</th>
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<td>Maputo</td>
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<td><strong>Southern Cluster</strong></td>
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<tr>
<td>Maputo</td>
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<td>Mozambique, Swaziland, South Africa</td>
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<tr>
<td>Maseru-Durban</td>
<td>Durban</td>
<td>Lesotho and South Africa</td>
<td></td>
</tr>
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<td>Phalaborwa-Richards Bay</td>
<td>Richards Bay</td>
<td>South Africa, Swaziland</td>
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<td><strong>Northern Cluster</strong></td>
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<tr>
<td>Dijibouti</td>
<td>Dijibouti</td>
<td>Djibouti, Ethiopia, South Sudan and Sudan</td>
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<tr>
<td>Lamu</td>
<td>Lamu</td>
<td>Kenya, South Sudan, Ethiopia</td>
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<tr>
<td><strong>Central Corridor</strong></td>
<td></td>
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<tr>
<td>Central</td>
<td>Dar-es Salam</td>
<td>Burundi, DRC, Rwanda, Tanzania, Uganda</td>
<td></td>
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<tr>
<td><strong>North South Corridor</strong></td>
<td></td>
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<tr>
<td>North South</td>
<td>Durban</td>
<td>DRC, Botswana, Malawi, Mozambique, South Africa,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Zambia, Zimbabwe</td>
<td></td>
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</tbody>
</table>

The ESA Region is straddled by twenty two (22) transport corridors and due to overlapping membership these cuts across the RECs. They are grouped into clusters as presented in table 3.1. The intermodal development across the corridors entails expansion and rehabilitation of ports, roads, rail, bridges, inland waterways and border-posts and progress has intensified along all the regional corridors; Western Cluster Corridors have recently completed rehabilitation and modernisation of all railway infrastructures with state-of-the-art equipment along Namibe, Lobito and Malange corridors. The project lead by Angola also includes new lines to integrate the rail network domestically and to interconnect with all neighbouring countries. The Walvis Bay Port, which serves three major corridors, namely; the Trans Kalahari Corridor (TKR), Trans Cunene, and Walvis Bay-Ndola Lubumbashi Corridor is currently undergoing expansion and modernization and the works encompass the expansion of the container terminal as well as the development of Inland Container Terminal (ICDs). Botswana, Zambia and Zimbabwe have been granted land for ICDs. The Botswana and Zambian dry ports are now complete and work is underway to establish the Zimbabwean dry-port. The Dry Port was established to achieve long-term economic aspirations which include the growth of companies and businesses and also to assist in the reduction of transportation costs as well as to promote the use of the Corridors. It has however been reported recently that the Botswana Dry Port was underutilized and efforts were being made to market it more rigorously.

Along the eastern coastline ports of Dar es Salaam, Mtwara, Nacala, Beira and Maputo are all under development. The port of Dar es Salaam upgrading is based on the recently completed and approved
Master Plan which includes the expansion and modernization of berths and the construction of access roads. The Port of Beira is also under-going dredging and rehabilitation. The Port Master Plan for Mtwara was recently completed and the land secured for expansion programme is to be funded by the African Development Bank (AfDB). Durban is constructing a new port and Maputo is undergoing modernisation under a concession agreement.

Significant progress is also being made on the upgrading of the road and rail networks as well as bridges and border posts throughout the region. The flagship Kazungula Road and Rail Bridge linking Botswana and Zambia is under construction and is scheduled for completion in 2018. The bridge is part of the North South Transport Corridor, a vital trade route that will serve as a gateway to all the strategic destinations of the region. The project will boost the construction of the state of the art, one-stop border-post facilities which will reduce border transit time through improved procedures and border management operations, and consequently, increased traffic throughput.

The Kazungula Bridge project is co-funded by AfDB, JICA and the EU, with contributions from both the governments of Botswana and Zambia. The SADC Secretariat was tasked with the overall oversight for the feasibility and Engineering Designs and the Member States have set up a technical Project Implementation Unit (PIU) to oversee the construction of the bridge.

One of the major challenges facing the region is that of delays at border posts when crossing frontiers across countries resulting in high costs for transit and cross border operations and the region has put a concerted effort in the development of a One-Stop Border Post Concept. The ESA Region under the leadership of COMESA has now operationalised three border posts namely; Chirundu (Zambia/Zimbabwe), Malaba (Kenya/Uganda) and Nemba/Gasenyi (Rwanda/Burundi) and Ruhwa.

Chirundu OSBP is one of the Region success stories which were championed under the tripartite initiative. Its Legal Status is such that is governed by three legal instruments: i) Zimbabwe One Stop Border Posts Control Act (No. 21) of 2007 ii) Zambia One Stop Border Control Act (No. 8) of 2009 iii) Bilateral Agreement between the Government of the Republic of Zambia and Government of the Republic of Zimbabwe. The Bilateral Agreement defines the objective and covers issues regarding the operations. The OSBP procedures went through an iterative process even after the border was opened because of significant variations which were made to take account of new challenges that emerged mainly related to physical infrastructure layouts. The OSBP is currently operating on enhanced efficiencies and capacity, following the changes in processing and clearance procedures under a OSBP model and the net effect is that the turnaround time for trucks has been significantly reduced.

The Tripartite also launched a Pilot Flag-ship Project; the North-South Corridor (NSC) Aid-for-Trade Programme in 2009. The NSC is one of the largest transnational corridors in the continent with approximately 10 000 kilometres, traversing eight (8) countries, constituting, road, rail, ports and one-stop border-post infrastructure. The intermodal infrastructural development lined-up under the NSC Programme includes upgrading and expansion of Dar es Salaam and Durban ports in Tanzania and South Africa respectively; the upgrading of road sections in Botswana, Zambia and Zimbabwe; upgrading of the railways connecting Zimbabwe, Botswana and South Africa and the upgrading of
the Beitbridge border post. The NSC will integrate the region from Durban to Lubumbashi via Gaborone and Harare, Lusaka and Lilongwe. Demographically, it connects a total population of two hundred and fifty two (252) million people or 50% of the Continent and with a collective GDP of approximately $460 billion. The pilot project was coordinated by the three RECs with SADC taking the lead.

The NSC Strategy requires high levels of facilitation and coordination to effectively rationalize the complexities of dealing with its huge scope, divergent stakeholders, rationalization of sovereign legal instruments, and the navigation of multiplicity donor requirements and validation of the different financial and contractual arrangements. The process of the NSC has to a large extent been informed by its forerunner, the Maputo Corridor Initiative, which comparatively is a much smaller scale but a major and successful corridor programme in the SADC Region.

COMESA working jointly with SADC is spearheading the Shire-Zambezi River Navigation project which aims at undertaking a detailed feasibility study for the opening of the Shire River in Malawi and Mozambique, and the Zambezi River in Mozambique and Zambia for navigation, in order to demonstrate its technical, economic, financial, social and environmental viability and sustainability. The proposed re-opening of the Shire - Zambezi Waterway for navigation to the Indian Ocean is expected to contribute to the competitiveness of the economies of Malawi, Mozambique and Zambia through the reduction of the cost of transportation.

EAC has established the Lake Victoria Basin Commission (LVBC) to manage transport on the Lake Victoria; the preparation of an Inland Waterways Transport Agreement; development of the Protocol for Sustainable Development of the Lake Victoria Basin; and capacity enhancement of national maritime institutions are other areas where progress has been achieved.

The RIDMP reviews for the SADC Regional airports infrastructure is impressive. The Oliver Tambo International Airport (ORTI) in Johannesburg, South Africa which serves as the regional hub has recently seen a huge expansion following the hosting of the 2010 World Cup. Other smaller airports in the region also underwent expansion in anticipation of the traffic overflows which did not materialise. While ORTI effectively handled all the traffic, the region as a whole benefitted from the expansion of the international airports.

5 Harmonization and Enforcement of Transport Regulations, Standards and Procedures

The regulation of road transportation forms an important component in all the agreements between Member States due to the high (80%) proportion of freight and passenger transport by road throughout the region.

The recent and most forward looking development in the ESA Region regarding harmonization of transport regulatory regimes, standards and procedures is the 2014 comprehensive study on Harmonized Road Transport Regulatory System which recommended the harmonisation and unification of road transport regulations throughout the ESA region to boost efficiencies. The ESA
study reviewed a number of issues including: definition of cross-border transport market volumes by authorities, quotas and management of numbers of permits, harmonisation of rates and harmonisation of road usage recovery charges.

The Region has resolved to adopt transport quality regulations and has developed and adopted the following harmonised standards:

a) Vehicle Dimensions
b) Vehicle Specifications and Equipment
c) Vehicle Testing Stations procedures
d) Transport of Abnormal Loads
e) Transport of Dangerous Goods
i) Vehicle overloading control

A structure has also been devised for harmonising road transport regulation to world class standards throughout the Tripartite region as a sound basis for optimum cross-border and domestic transport regulation for the future development of road transport for both passengers and goods. The next stage is the domestication of the standards into national laws and regulations, the development of capacity to ensure uniform implementation and coordination of law enforcement practices including harmonised definition of offences and severity of fines and penalties.

The ESA Region agreed on a common framework for the joint implementation of the “Open Skies Programme” the concept of which is encapsulated under the Yamoussoukro Decision (YD). The Three RECs COMESA, EAC and SADC have jointly developed the Competition Regulations which were adopted by the Ministers in 2004 subsequent to which a Joint Competition Authority (JCA) was established to oversee the implementation of the regulations. The Guidelines, provisions and procedures for implementing the Competition Regulations were developed and adopted by the Tripartite in 2007. The JCA was launched at the first Tripartite Summit of 2008, where it was decided that the JCA Secretariat would be hosted at the SADC Secretariat and chaired by COMESA.

The process has stalled mainly because the Air Transport desk at SADC and COMESA has been vacant for a long time. The roadmap that was proposed then involved the development of Legal and institutional framework to give effect to the mandate of the JCA by establishing organisational and management structures for the JCA Secretariat.

Alongside the Open Skies policy the Region has also been actively pursuing other supporting policies and regulatory frameworks for the air transport in the area of security and safety. EAC established the Civil Aviation Safety and Security Oversight Agency (CASSOA) in 2007 through Article 92 of the EAC Treaty. The objective is to provide a common framework and mechanism for the Partner States to fulfil their international safety and security oversight obligations. The CASSOA mandate is to ensure a co-ordinated development of the civil aviation safety and security oversight infrastructure in the Partner States guided by international safety and security-related standards and recommended practices. The institution is governed by the Board composed of Heads of Civil Aviation in the Partner
States, the Executive Director and one aviation expert from each Partner States appointed by the respective Minister responsible for civil aviation.

The SADC Secretariat coordinated and facilitated the implementation of the COSCAP-SADC project which commenced in April 2008. The aim of the Project is to improve Member States capability to meet their responsibilities in the area of civil aviation safety consistent with ICAO Standards and Recommended Practices (SARPs). Member States’ obligations under the Convention on International Civil Aviation (Chicago Convention 1944) is to, amongst others, uphold the international flight operations and airworthiness safety standards and practices contained in the Annexes to the Convention and all SADC Member States are signatories to the Convention on International Civil Aviation (1944).

The COSCAP-SADC project, has established a Flight Safety Working Group (FSWG) composed of flight operations, airworthiness technical specialists and legal experts from the CAAs of SADC Member States. The FSWG’s focus is to update and harmonize the basic civil aviation legislation and regulations used by Member States’ Civil Aviation Authorities (CAAs). Harmonisation of regulations and procedures on the other hand, are carried in line with Article 9.4 of the SADC Protocol on Transport, Communications and Meteorology which states that “Member States shall encourage recognition of each other’s licences and certificates of airworthiness, provided they comply with ICAO SARPs

6 Facilitate transit traffic and border procedures

The ESA Region has the highest number of landlocked countries in the Continent hence the issue of transit facilitation becomes paramount. Ten (10) out of a total number of fifteen (15) landlocked countries in Africa are in the ESA. Six (6) countries namely Botswana, Lesotho, Malawi, Swaziland, Zambia and Zimbabwe are members of the SADC; and four of which are also members of COMESA. The other four; Ethiopia, Uganda, Burundi and Rwanda are members of COMESA and three (3) are also EAC members. Studies indicate that these countries are disadvantaged in the global trade by virtue of their geographical circumstances and as such suffer from high trade and transport costs. The focus currently is to create an enabling environment which will facilitate the reduction of transit times and transaction costs along the principal corridors in Eastern and Southern Africa through providing faster border crossings, and harmonised trade and transit regulations.

The three RECs have made considerable progress in developing systems and procedures targeted towards addressing challenges related to transit traffic. The outcomes have informed the tripartite process resulting in acceleration in harmonization of transit standards and procedures across the ESA Region.

The notable achievements in COMESA include:

a) The Introduction of uniform road transit charges in July 1991 which has resulted in the realization of lower road user charges throughout the COMESA bloc.
b) The Adoption of compulsory motor third-party liability insurance scheme which has facilitated smooth movement of motor vehicles in the region and the establishment of a common system for the settlement of claims arising from inter-state motor vehicle accidents.

c) The Introduction of COMESA Carrier License in 1992 which replaced road service permits required from haulers operating across borders, resulting in the liberalization and deregulation of the regional trucking industry as well as competitive freight rates.

d) Harmonization of Axle Load Limits to facilitate uniform axle load enforcement and exchange of information on violators of axle load limits.

e) The Introductions of COMESA Customs Document in September 1996 to replace 13 different documents which has reduced clearance costs and delays at borders.

f) The piloting of COMESA Customs Bond Guarantee Scheme in October 1997, which eliminated administrative and financial costs associated with the current practice of nationally executed customs bonds for transit.

g) Launching of the management information system performance, communications and exchange of information between transport operators and shippers on one hand and between modes of transport on the other hand. This has improved the movement of goods.

SADC has undertaken studies and has consulted extensively on the issue of Road User Charges. Consensus was reached on consolidation of levies including enacting the necessary legislation to facilitate consolidation of tariffs to be levied based on agreed formula and modalities and the coupon system was chosen as the preferred mode. The processes has however been stalled following a decision by Ministers of Transports directing the three RECs to harmonise the SADC studies with the COMESA detailed technical studies.

Building up on these gains, the three RECs adopted an aggressive approach to address these through a joint programming cross border transit initiative. Consequently, the Tripartite launched a Comprehensive Trade and Transport Facilitation Programme (CTTFP) in 2010 with a series of initiatives from the RECs brought together into one large integrated trade facilitation programme.

The objectives of the CTTFP are;

- Increase trade and promote economic growth in Eastern and Southern Africa by supporting improvements in policies and in the regional regulatory and economic environment;

- Reduce high costs of trading in the region and help the national administrations, working through the RECs, to address barriers to trade and growth;

- Reduce transit times and transaction costs along the principal corridors in eastern and Southern Africa through better infrastructure, faster border crossings and harmonised trade and transit regulations; and
• Improve aid effectiveness by coordinating donor funding for priority Aid-for-Trade programmes as such as the NSC.

The CTTTFP includes customs procedures, immigration and transport procedures, road user charges, self-regulated regional road transport management system, establishment of corridor management groups. The intensions and aspirations behind this initiative are to implement a holistic programme that addresses trade and transit traffic facilitation. To date harmonization has been achieved in the following:

a) Driver Licence Formats  
b) Harmonized Vehicle Load - Management (overload controls);  
c) Harmonized Vehicle Regulations and Standards;

d) Tripartite Transport Registers, Information Platform and Systems (TRIPS) as a tool for jointly managing the accreditation, licensing and compliance monitoring of operators, vehicles and drivers in international transport operations;

e) Harmonization of Cross Border Third Party Motor Vehicle Insurance Schemes  
f) The Road Transport Management Scheme-a voluntary compliance scheme by transporters.

g) Transportation of Dangerous Goods  
h) Road signs and nomenclature  
i) Standard Structures for Corridor Management Committee

The CTTTFP has integrated all the critical aspects required to eradicate challenges related to transit traffic and transaction costs along the major corridors and in this regard the ESA region has achieved a major milestone. The architecture of the CTTTFP is a hybrid integrating institutions and technical expertise and it is anticipated that it will provide integrated solutions for the common good of the region.

It has to be noted however that these programme like all others which were funded by DFID under the Tripartite Initiative are experiencing a reduced momentum due lack of the coordinating structure and financial constraints.

7 Achievements/ Shortcomings and Strengths/ Weakness

7.1 Achievements and Short Comings

Despite the general consensus that implementation of treaties and protocols is moving at a slow pace the ESA Region has registered considerable progress in the development of policy, legal and regulatory frameworks as well as establishment of enabling environment with regard to corridor
institutional arrangements and private sector participation. These achievements as presented on table 6.1 and numerous others; marks the attainment of critical milestones.

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Shortcomings</th>
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<tbody>
<tr>
<td>• COMESA; Completion of the <em>Transport and Communications Policy and Strategy and Priority Investment Plan (TSP/PIP)</em>,</td>
<td>• Complexities of dealing with overlapping Memberships of Member States</td>
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<tr>
<td>• COMESA; revolutionizing of trade and transport facilitation approaches by adopting new technologies- the recently launched Virtual Trade Facilitation System (VTFS) - a software application that integrates all trade facilitation instruments, including the Yellow Card and the COMESA Regional Customs Guarantee (RCTG) Scheme, known as the CARNET, under one online platform.</td>
<td>• Poor adaptation of regional policy, legal and regulatory frameworks</td>
</tr>
<tr>
<td>• EAC: completion of <em>Transport Strategy and Road Sector Development Programme (TS/RSDP)</em> to guides the intervention areas for policy harmonization; regulatory framework and standardization of Infrastructure networks.</td>
<td>• Lack of convergence and occasional nationalistic tendencies negating advancement of agreed regional goals.</td>
</tr>
<tr>
<td>• SADC: The completion of the Spatial Development Initiative Strategy in 2008 supports the integrative approach in planning and development of infrastructure</td>
<td>• Duplication of programmes and efforts hence poor utilization of the meagre financial and manpower resource base</td>
</tr>
<tr>
<td>• SADC: The launching of the SADC RIDMP –TSP in 2012 which presented a new opportunity to up-scale the implementation</td>
<td>• Divergent economic views and focus</td>
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<tr>
<td>• Development of SADC Transport Protocol; COMESA Trade and Transit traffic Protocol which continues to guide development of policy, legal and regulatory framework.</td>
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<tr>
<td>• Harmonised road transport laws, regulations and standards which will be implemented under the Tripartite Transport and Transit Facilitation Programme (2016-2020), thus creating a single road transport market to underpin the Tripartite Free Trade Area (FTA), and the SADC and COMESA FTAs, and the EAC Customs Union</td>
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<tr>
<td>• Joint implementation of flagship projects which sets precedence on the best approaches and strategies to address major challenges related to trade and transit traffic facilitation includes; the North-South Corridor, Chirudu One-stop Border Post etc,</td>
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<tr>
<td>• Institutional and Technical integration of the three RECs through the Tripartite initiative.</td>
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<tr>
<td>• Development of Strategy Documents to guide planning and implementation of programmes including Transport; COMESA 2011-2015 Medium Term Strategic Plan; SADC Regional Indicative Strategic Development Plan RISDP; EAC; 4th Development Strategy 2011/12-2015/16.</td>
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The shortcomings are few but are of high magnitude and much broader that the area of the transport sector. Opportunities are however that linear infrastructural development such as road, rail and air routes permeates boundaries like rivers and has greater prospects of overcoming most of these challenges.

### 7.2 Strength & Weakness

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tbody>
<tr>
<td>All the RECs have established and functional organs and institutions and national coordination structures.</td>
<td>Under staffed Transport Units especially SADC and COMESA with 15 and 19 Member States respectively but comparatively not adequately staffed compared to EAC.</td>
</tr>
<tr>
<td>The ESA Region brings together half of the continent and in that respect a large population and economy</td>
<td>Lack of legal frameworks at national level to provide for the enabling legal regimes to underpin implementation of regional projects.</td>
</tr>
<tr>
<td>Relatively, the RECs are staffed with highly skilled and competent staff and the region generally boosts a high human resource base and competencies.</td>
<td>Lack of capacity to undertake oversight and the enforcement of the relevant protocols and Council decisions at national level.</td>
</tr>
<tr>
<td>Growing economies and a keen private sector</td>
<td>Lack or inefficiency of institutions such as corridor management institutions, customs, standard bureaus, an export promotion agencies.</td>
</tr>
<tr>
<td>Positive international perceptions of the region and well established partnerships with International Cooperating Partners;</td>
<td>Limited implementation of transport protocols at national level,</td>
</tr>
<tr>
<td>Joint pooling of resources lending itself to optimisation of resources through the Tripartite initiative have elevated the ESA Region to another level;</td>
<td>synchronising of different programmes and instruments in countries belonging to more than one REC as well as enforcement of protocols and agreements remains a major challenge for countries with overlapping membership;</td>
</tr>
<tr>
<td>This focus has enabled the three RECs to deal with diversity and to reap the gains for the benefit of the region as a whole;</td>
<td>Complicated governance system given the multitude of States and RECs;</td>
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<tr>
<td>The joint planning, financing and implementation through a number of funding vehicles, notable being support from DFID within the Tripartite framework and now the European Development Fund 11 through the COMESA EAC IGAD IOC and SADC inter-regional cooperation mechanism, which has strengthened cooperation amongst the ESA States;</td>
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Table 6.1. Achievement and shortcomings
- Taking full advantage of the comparative advantage of each REC, enabling each REC to play a lead coordination role in areas where it’s the most advanced;
- Enhancing economies of scale through promotion of cross border infrastructure which enjoys enhanced utilisation and increased rate of return;
- Harmonised policies across the ESA region avoiding different policy prescriptions by different RECs in the same States where there are overlaps of constellations of States;
- Inter-regional cooperation has leveraged increased support from International Cooperating Partners given the optimisation and enhanced spread of benefits of any support rendered to all participating States;
- Enhanced synergies of ESA Programmes with the African Union Agenda given that the RECs are key pillars of the African Union;
- The ESA harmonised policies have constituted a baseline for AU policies and become an influential force within the continental policy framework;
- Projects that were not viable at regional level became viable at the ESA level leading to early realisation of projects that were dormant for some time;
- Given the role of infrastructure to deepening regional integration, ESA States cooperation has enhanced the operationalization of the Tripartite Free Trade Area launched by Heads of States in Sharm el Sheikh, Egypt, in June 2016, paving the way for the Continental Free Trade Area (CFTA), whose negotiations were launched in June, 2015;
- Cooperation amongst ESA States broke down barriers of cooperation, and set a mind-set of cooperation in areas beyond infrastructure.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>- States with limited commonalities having to work together.</td>
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</table>

Table 6.2. Strengths and weakness

There are a number of weaknesses that the ESA framework experiences, although it is true to say that there are by far more strengths than weaknesses. The ESA region has made giant and unprecedented strides over the last ten years, especially in terms of inter-regional cooperation, harmonisation, joint planning and implementation. The key strengths and weaknesses of the ESA region include, but are not limited to those listed on table 6.2 above.
8 Institutional Relations

8.1 Associations

SADC has forged ahead with the creation an enabling environment by bringing associations established by private sector under its ambit as partners in the delivery of regional infrastructure, a strategic and forward looking approach which continues to mitigate and augment the Secretariat’s capacity. Four of these associations; Southern African Railway Association (SARA), Association of National Road Agencies (ASANRA), Port Management Association of East and Southern Africa (PMAESA) and Airline Association of Southern Africa (AASA) have now fully integrated their programmes with regional plans and are involved in the strategic planning process.

a) The Southern African Railways Association (SARA) is based in Zimbabwe and was established in April 1996 and its mandate to provide a strong lobbying association to pursue advocacy for fair surface transport competition to be achieved through “levelling of the playing field” between road and rail in terms of policy and regulations.

b) The Association of Southern African National Roads Agencies (ASANRA) was established in March 2001. Their mandate is to support and develop an integrated transportation system that meets the national and regional goals and objectives. ASANDRA is viewed as a platform for networking on policy formulation and technical exchange among the industry and professionals in the road transport sector in the region.

c) The Port Management Association of Eastern and Southern Africa (PMAESA) was initially established as the Port Management Association of Eastern Africa, in Mombasa, Kenya, in April 1973, under the auspices of the United Nations Economic Commission for Africa (ECA). PMAESA is an inter-governmental organization made up of Port Operators, Government Line Ministries, Logistics and Maritime Service Providers and other port and shipping stakeholders from the Eastern, Western and Southern African and Indian Ocean regions. Their primary objective is to strengthen relations among member ports with a view to promoting regional cooperation and subsequently regional integration. It is constituted by twenty seven (27) Member States.

d) The Airlines Association of Southern Africa, (AASA) mandate is executed in close liaison with the Aviation Industry and Government on policy, regulatory, planning, operational, safety, security and financial matters affecting the overall profitability of the airlines and their continued sustainability. They also coordinates the airline industry position on airport, airspace and civil aviation issues, as well as consumer legislation, environmental tourism matters and handle the public relation issues related to their mandate. There are currently 29 associate members.

COMESA and EAC do not have formalised structures but work closely with the private sector on a pro rata basis as and when situations arise. The three RECs also work closely with Federation of East and Southern Africa Road Transport Associations (FESARTA) who’s predecessor, the Federation of
Regional Road Freight Association (FRRFA) was founded in 1993 but subsequently changed name following a resolution made in Mombasa in November 2000, that its services should be extended to include East Africa and change its’ name to Federation of East and FESARTA. The founding members of FRRFA were transporters associations from Malawi, South Africa, Zambia and Zimbabwe. Operator associations from Botswana, Lesotho, Namibia, Swaziland and Tanzania joined at a later stage. FRRFA was initially established to response to numerous challenges relating to transport transit issues posing huge delays resulting in huge losses to transporters.

The COMESA-EAC-SADC -Tripartite also established a Project Preparation and Implementation Unit (PPIU) based in Lusaka, Zambia, which is however no longer functional because resources constraints. The PPIU responsibility was to coordinate, manage and monitor Tripartite infrastructure projects in the Southern and Eastern Africa region. The PPIU tasks involved preparation of infrastructure projects to a bankable stage once these projects had been identified by the Tripartite and/or approved by the Investment Committee of the Tripartite Trust Account (TTA).

The objectives of the PPIU were to amongst others to:

- Establish a pipeline of infrastructure projects for the Tripartite.
- Assist with the development and implementation of the Tripartite Infrastructure Master Plan
- Develop close and strong working relationships with the various project preparation facilities and relevant donors.

### 8.2 Corridor Institutions

The SADC Region has configured corridors into “Four clusters” in order to facilitate joint planning, coordination, monitoring and reporting of regional trade, transport facilitation as well as implementation of infrastructure projects. The criteria that was used to determine the clustering was largely geographical.

The Corridor Cluster is a forum for consultations and the convening of technical and ministerial meetings to address common issues. This approach has been prompted by the absence of formal and functional joint corridor management institutions in the majority of corridors and the need to rationalise the institutions and meetings.

The Trans-Kalahari Member States; Botswana, Namibia and South Africa signed MoU in 2003 while the Walvis Bay-Ndola-Lubumbashi Member States; DRC, Namibia and Zambia signed MoU in March 2010. The other four corridors in this cluster; Bas Congo, Malange, Namibie and Trans Cunene have not commenced the process.

The Trans Cunene Member States; Namibia, Angola, South Africa are exploring the possibility of resuscitating their cooperation under the coordination of the SADC Secretariat. On the other hand, the Member States for the Trans Orange corridor; Namibia and South Africa have signed a bilateral MOU. Lobito corridor is lagging behind but the SADC Secretariat has commenced the process of facilitating the adoption of the MoU.
Considerable progress has also been achieved in the establishment of the institutional frameworks within the Eastern Cluster. Dar Es Salaam corridor stakeholders- have signed the constitution with the exception of DR Congo pending finalisation of the process. The Beira Corridor Member States; Mozambique and Zimbabwe have signed a MoU which is currently under review to include Zambia, Malawi and DRC. The Limpopo Corridor member states; Mozambique and Zimbabwe are negotiating the adoption of a legal framework for transforming Limpopo Corridor into a development corridor.

The Member States for the Southern Cluster are Lesotho, Mozambique, South Africa and Swaziland. This cluster hosts one of the most progressive corridors in the continent the Maputo Corridor traversing Mozambique, Swaziland and South Africa. Two member states; RSA and Mozambique signed MoU in 1996. Maputo Corridors Logistic Initiative (MCLI) was established as a private sector led corridor stakeholder’s forum to promote the corridor initiatives. MCLI has a Secretariat that coordinates its activities and programs. The other three corridors in this cluster; Manzini-Durban; Maseru-Durban and Phalaborwa-Richards Bay are governed by permanent commissions of cooperation and bilateral transport agreements.

8.3 Member States

<table>
<thead>
<tr>
<th>COMESA</th>
<th>EAC</th>
<th>IGAD</th>
<th>SADC</th>
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<tbody>
<tr>
<td><strong>Article 71 (I c &amp; g)</strong> empowers the Secretariat to undertake strategic planning &amp; management, monitoring &amp; evaluation of projects and programmes for the development of the Community.</td>
<td><strong>Article 12, 2(d)</strong> Secretariat shall be d) to initiate, identify and coordinate development programmes and projects</td>
<td><strong>Article 14</strong> Secretariat shall responsible for strategic planning and management of the programmes of SADC;</td>
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<tr>
<td><strong>Article 9: 1, 2 (a)</strong> the council of ministers shall monitor and keep under constant review and ensure the proper functioning and development of the common market in accordance with the provisions of this treaty</td>
<td><strong>Article 14 (2)</strong> empowers the Council to promote, monitor and keep constant review of the implementation of the programmes of the Community and ensure its proper functioning”</td>
<td><strong>Article 10, 2 (e)</strong> functions of the Council shall be to promote, monitor, coordinate and harmonize initiatives for realizing the Authority's objectives</td>
<td><strong>Article 11: 2, (b)</strong> oversee the implementation of the policies of SADC and the proper execution of its programmes;</td>
</tr>
<tr>
<td><strong>Article 14: 2, (a)</strong> the intergovernmental committee shall be responsible for the development of programmes and action plans in all the sectors of co-operation</td>
<td><strong>Article 21 (b)</strong> empowers the Sectoral Councils to monitor and keep under constant review the implementation of programmes of the Community within their respective sectors</td>
<td></td>
<td><strong>Article 13</strong> The Standing Committee shall process documentation from the Sectoral and Cluster Ministerial Committees to the Council. The Standing Committee shall report and be responsible to the Council.</td>
</tr>
</tbody>
</table>
**Article 15:** The technical committees of the common market shall be:
and the committee on transport and communications. The technical committees shall be composed of representatives of the member states designated for that purpose.

**Article 18** empowers the Coordination Committee to submit from time to time reports and recommendations to the council on the implementation of the Treaty.

**Article 16A:** SADC National Committee:

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1(i)</td>
<td>The technical committees of the common market shall be: and the committee on transport and communications. The technical committees shall be composed of representatives of the member states designated for that purpose.</td>
</tr>
<tr>
<td>18</td>
<td>Empowers the Coordination Committee to submit from time to time reports and recommendations to the council on the implementation of the Treaty.</td>
</tr>
<tr>
<td>16A</td>
<td>SADC National Committee: provide input at the national level in the formulation of SADC policies, strategies and programmes of action.</td>
</tr>
</tbody>
</table>

Table 7.1. Oversight and implementation structures at Member States level

Member States oversight structures are established under the relevant article of the Treaties and for IGAD under the Agreement. Roles and responsibilities have similarities at the apex levels but start to be specific at operational levels and different configurations in line with RECs agendas. Oversight Structures are generally constituted as follows from the lower levels; by Committees of Transport Expert; Committees of Officials from the line ministries reporting to Ministers Responsible for Transport and the latter report to Council of Ministers. These are prescribing in the treaties under relevant Articles as presented below on table 7.1. Committees of Experts meet much more frequently to deliberate on specific issues.

Some of those committees as in the case of SADC Structures include; the Civil Aviation Committee (CAC) for the Air transport: Directors and CEOs of Roads, Ports and Railways. At project level, Member States have established Project Implementation Units (PIU) staffed by professionals from participating countries; e.g. for the Churundu One Stop Border Post, Shire-Zambezi, the Trans-Kalahari Railway etc. These are usually seconded from the line ministries to the project office.

### 8.4 Donor Communities and International Funding Organizations

The International Cooperating Partners (ICP) support to SADC is guided by Windhoek Declaration which is an Agreement between SADC and International Cooperating Partners (ICP) adopted in Windhoek, Namibia in April 2006. This declaration is based largely on the five key principles of the Paris Declaration on Aid Effectiveness, namely: Ownership, Alignment, Harmonisation, and Managing for Results and Mutual Accountability.

SADC has established a partnership forum with the International Cooperating Partners called the **SADC-ICP Partnership Dialogue.** It comprises two structures namely: **The Core Group** and the **Thematic Group.**

The **Core Group** is a collaborative platform between SADC and ICPs. This group plays a crucial role of coordination and networking as well as facilitating inter-sector and inter-institutional dialogue and cooperation. The Group meets twice a year.

The Thematic Group is a sector specific forum, derived from the priority areas identified by SADC. The Groups are streamlined to match individual ICP thematic areas of interest and represents the
technical level of the partnership between SADC and ICPs. They are intended to execute the following key functions:

- Advocacy for the mainstreaming of all SADC priority programmes in line with the SADC Resource Mobilisation Strategy.
- Advocacy for better coordination and linkages between national and regional programmes and projects.
- Provide a networking platform for information sharing and knowledge development.
- Execute due diligence to ensure that the views of sector stakeholders are adequately reflected in the cooperation and the SADC-ICP dialogue forums.

The Transport sector’s lead ICP currently is de facto EU by virtue of the size of their funding support to SADC following the withdrawal of DFID.

EAC resource mobilization is guided by Article 71 (i) of the Treaty. The Strategy that EAC has adopted with regard to resources mobilisation is to engage Development Partners through the following mechanisms:

a) Signing memoranda of Understanding;

b) Signing multi-year Contribution/financing Agreements;

c) Continue with the current engagement with development Partners under the Partnership Fund Framework/arrangement; and

d) Setting up Development Partner Thematic Working Groups to finance specific sectors and intervention on the Strategy.

COMESA Strategy 2011-15 highlights the crucial role played by Development Cooperating Partners in supporting the community programme. The main funding partners of the institution are listed as; the European Commission, USAID, DFID, CIDA, AFDB and Norad. Other institutions that provide technical support include the World Bank and UN Agencies like ITC and UNCTAD. COMESA has also adopted a contribution agreement approach which is deployed to channel support from the EU and COMESA Fund for support to member States implementation of regional programmes.

9 Organizational Review & Human Resource Needs

The current capacity for Transport desks in all the RECs is very lean with the core structure indicating one officer responsible for the programme as presented on table 8.1 below.

9.1 COMESA Unit

The Transport section has one Senior Transport Economist who is responsible for all modes of transport. Ideally each mode should have a specialist but attempts to increase the staff complement has been undermined by limited resources. The Senior Transport Economist is partially supported by
the recently recruited NEPAD funded Infrastructure Expert who only focuses on PIDA projects. Due to understaffing, the section relies on short term consultants recruited for specific assignments which would have otherwise been performed by modal experts had they been in the Divisional Structure.

9.2 EAC- Transport Unit

The Director Infrastructure heads the infrastructure section and they report to the Deputy Secretary General, Planning and Infrastructure. The section has two departments of Transport and Works headed by Principal Civil Engineer assisted by Senior Engineer Materials and Pavement, Senior Transport Economist, Corridor Advisor and responsible for projects and programmes in roads, railways, OSBPs, PIDA and Corridor management and the Civil Aviation and Airports department headed by Principal Civil Aviation Officer responsible for projects and programmes in civil aviation and airports sub sectors.

<table>
<thead>
<tr>
<th>No</th>
<th>Position</th>
<th>COMESA</th>
<th>EAC</th>
<th>IGAD</th>
<th>SADC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sectional Head</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2.</td>
<td>Office responsible for Road Transport</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3.</td>
<td>Office responsible for Rail Transport</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4.</td>
<td>Office responsible Air Road Transport</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5.</td>
<td>Office responsible for Maritime Transport and</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6.</td>
<td>A dedicated office for Corridors Coordination</td>
<td>Consultants Part-time</td>
<td>Support</td>
<td>No</td>
<td>Support</td>
</tr>
<tr>
<td>7.</td>
<td>Infrastructure Expert –NEPAD PIDA (Cross-cutting issues)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 8.1. RECs Current Staffing levels- Transport Division

9.3 SADC- Transport Unit

SADC Transport Unit is currently staffed by a Senior Programme Officer (Transport), supported by two supplementary staff sponsored by EU and NEPAD who are responsible for the Corridor Programme and NEPAD Infrastructure Programme respectively. The Directorate of Infrastructure and Services has for a long time requested to augment the Transport Unit such that it would be staffed with a programme officer for each mode i.e. Road, Rail and Air but this has not been possible due to resource constraints. An Air Transport Officer was engaged on a temporary basis for some time supported by Member States funding but the position has not been filled since the position fell vacant in 2013, a development which has stalled the air transport programme. The major challenge facing SADC now is lack of a lead ICP for Transport following the withdrawal of DFID.
10 Funding

Funding remains one of the major constraints facing the infrastructure departments at a number of Regional Economic Communities. Funding is required to facilitate the following programmes:

- Funding for staff on the RECs permanent structure (Member States funding);
- Funding for Technical Assistants provided by International Cooperating Partners to undertake projects with a clearly defined life span (usual 3 – 5 years) and can be in phases;
- Funding for projects in the form of capacity building project preparation and even construction;
- Funding policy meetings of Member States;
- Funding for Workshops, project management, and sometimes design of new projects as well as expansion, modernisation and expansion;
- Funding for capacity building at the level of Secretariat, Member States, Regional Bodies, and Stakeholders

10.1 Funding from Member States

Member States provide funding to RECs to meet the costs of emoluments for staff, convening of policy meetings as well as the day to day recurring expenditure of the Secretariats. However, Member States have constraint when it comes to financing of studies, consultative processes and workshops.

10.2 Financing from International Cooperating Partners

At the programme level, ICPs provide much more funding to the RECs, Member States, Regional Bodies and other stakeholders and as such the role of ICPs remains indispensible. ICPs provide funding to RECs at individual level, but experience has shown that support rendered through the Tripartite (COMESA-EAC-SADC and IGAD) has the opportunity to achieve more given the overlapping nature of the constellation of States in east and Southern Africa. This funding has been channelled to the individual RECs, or through the creation of Special Purpose Vehicles (SPVs) like Trade Mark, CRIDF, all largely supported by DFID, with a specific focus. Furthermore, funding created to support continental initiatives like PIDA have proved to be effective as the bring about cohesion across the region as well as ensure that all States under the auspices of the African Union move at the same pace, there by promoting continental integration and equity in development.

Going forward, the strategy of using such SPVs should be promoted, but requires buy-in from the States and the RECs. It must be noted however, that RECs being the pillars of the African Union should be supported by meeting the capacity gaps through ICPs in order to effectively deliver both the Tripartite and African Union mandate. The support rendered should however be based on a clearly agreed programme of intervention at all levels of the key players, with detailed works plans.

It is also noteworthy, that most RECs have developed or are in the process of developing a Regional Development Fund, with various windows aimed at funding projects in different thematic areas. Such
funding would entail equity from Member States and ICPs, who would agree on the appropriate institutional structure to administer the fund. Project preparation remains one of the key mandates of such funds.

For a funding programme for the RECs to be effective, there are a number of critical success factors to be met, namely:

(i) Ensure that such funding is channelled towards programmes approved by Member States;

(ii) The supported programmes are an integral part of the RECS Strategic Plan, and are mainstreamed in the RECs Work Plans;

(iii) There is consensus among the RECs which would workshop the concept for finalisation and endorsement; and

(iv) The institutional mechanism has buy-in from the RECs and the States.

11 Summary

Despite numerous challenges faced by the regional transport sectors, there is a new buoyancy that the new approaches to trade and transit traffic facilitation and corridor development concepts may have greater success for the ESA Region. The cooperation of the three RECs and their member States through the Tripartite Initiative has revolutionized the process and found new ways of doing things which brings greater benefits for the region. The ESA region is showcasing the best practices on the continent. The Tripartite has established SPV platforms which have enabled them to jointly build on their successes and to interrogate their challenges to convert them into opportunities.

The ongoing infrastructural developments which are approached in an integrative manner are in themselves building blocks toward regional integration. If any agenda could fast-track the goal of regional integration it would be the linear infrastructure development; road, rail and supporting infrastructure for energy and telecommunication because it cuts across geographical boundaries. The issues surrounding linear infrastructure development do not require rigorous interrogations and negotiations as most are a given. The scope of the transport sector in the ESA region is large and currently being overseen by a total staff not exceeding ten (10) people, working for the three Rocs’ The scope of work encompasses over twenty transport corridors, eighteen (18) under SADC and COMESA and four (4) under COMESA IGAD and EAC.

The foremost challenge facing the RECs and Member States is having a weak institutional capacity resulting in poor and inadequate coordination and facilitation. This has resulted in slow implementation of programmes.

Currently progress on the flagship NSC is slow mainly because of capacity constraints. The high pace at which the trade and transit issues were moving has slowed down, for the same reasons and the region is currently experiencing a decline in this regard.
There is a need for an urgent response to capacitate the RECs to rekindle the momentum gained from the Tripartite initiative. SADC and COMESA have stated the requirements which are similar and would most probably be also applicable to EAC.

12 Recommendations

These guidelines attempt to provide a new conceptual framework and practical recommendations for capacity enhancement of the RECs Transport Units given the enlarged scope of work as highlighted by the review. The role and responsibility of the RECs Transport Divisions is broad, constituting at least five thematic areas; Road, Rail, Air, Inland Waterways and Maritime and Ports, underpinned by the development of the Policy, legal and Regulatory frameworks. The fundamental challenge is one of inadequate staffing of RECs Transport Units in the ESA region generally, which in turn has given rise to weak structures and poor implementation undermining the aspirations of the Member States.

It is important first and foremost to outline capacity related outcomes, which this guideline is attempting to achieve and there has to be a general agreement with respect to levels at which capacity enhancement should be directed; the RECs, Corridors institutions, Association or SPVs created to accelerate the trade and transit traffic facilitation programmes such as the Tripartite initiative. Clearly a joint approach through the Tripartite Initiative has fast tracked convergence of policy, legal and regulatory frameworks within the three RECs and pushed implementation of some of the critical components of transport soft and hard issues. Some of the spin offs which has also been the achieved are those of the institutional and technical integration which are critical for realization of the key objectives of regional integration.

In this regard it is therefore recommended that consideration should be given to:

1. Strengthening of the RECs Transport Units such that there is an officer for each mode;
2. Enhancing capacity of corridor institutions as they are directly responsible for implementation.
3. Creating Special Purpose Vehicle similar to Tripartite initiative to coordinate and facilitate the trade and transport facilitation issue and enable the RECs to concentrate on their core mandate.

This desire to enhance capacity to effectively execute the entire scope of the work in the transport sector has been brought up in a number of forums some which have yielded positive results like the NEPAD Programme which is mainly directed at the PIDA Initiative. The NEPAD Experts are however looking at cross-sectional aspects of infrastructure and are not dedicated to transport. It is too early in the process to assess its impacts and determine whether initiative will adequately address the gap to ensure efficient delivery of the transport mandate.
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MODULE 10 CORRIDOR MANAGEMENT INSTITUTIONS (CMIs)

10.1 Corridor Institutional Framework and Organization

By Jean Kanyamuhanda

Table of Contents

1 The current organization of corridor management entities .............................................. 2
2 How can corridor management efficiency be improved? .................................................. 2
  2.1 Enhancing the efficiency of existing CMIs ................................................................. 2
  2.2 Different scenario of corridor configuration and management ............................. 3
    2.2.1 Corridors connecting different RECs ................................................................. 3
    2.2.2 Case of NCTTCA and CCTTFA .............................................................. 3
    2.2.3 Different corridors in the same REC .............................................................. 4
  2.3 Establishment of new CMIs ....................................................................................... 4
    2.3.1 CMI creation process ....................................................................................... 4
    2.3.2 The case of West Africa: ECOWAS and WAEMU corridors ...................... 4
    2.3.3 CMIs and Corridor status .............................................................................. 5
3 CMI Human and Financial Resources ................................................................................. 5
  3.1 Human resources ...................................................................................................... 5
    3.1.1 Staff profile and skills requirements ............................................................... 6
    3.1.2 Political considerations ................................................................................... 6
  3.2 Financial resources: Estimate of annual CMC budget ........................................... 6
4 CMI funding sources ............................................................................................................. 7
5 Institutional Framework and Organization ........................................................................ 9
  5.1 Corridor interveners ................................................................................................. 9
  5.2 Roles of corridors stakeholders ............................................................................... 9
  5.3 Recommended CMI organizational structure ......................................................... 9
6 Conclusions and Recommendations .............................................................................. 10
7 Bibliography ................................................................................................................... 11
1 The current organization of corridor management entities

The importance of transport corridors in promoting the economic development of countries and regions, as well as the complex nature of such a corridor that combines several aspects (physical infrastructure, economic, social, legal etc.) do require an appropriate corridor management system and framework to ensure that the corridor expectations will be achieved. Two major management modes of transport corridors are observed across the African regions, with an impact on the overall corridor performance in terms of transport costs and delays, and the corridor contribution to the national and regional economies. While dedicated management agencies have been established in Eastern Africa, corridor issues are managed under RECs Transport departments in Central and Western Africa. In terms of efficiency, dedicated management units are generally more technical and corridor focused, while RECs transport units tend to get a wide overview of all regional transport aspects. RECs Transport departments are generally understaffed and technically less skilled than dedicated CMIs. They use to operate under a heavy structural organization with long administrative procedures and decision-making processes, while CMIs are light and autonomous structures.

2 How can corridor management efficiency be improved?

Three scenarios may be considered: corridors managed under an existing coordinating entity like in eastern Africa, corridors under REC Transport units like in West Africa, and corridors under other management arrangements. The last category may be corridors at the formative stage, or under bilateral or joint committees of senior/technical experts from member states. Whatever the considered scenario, improving corridor management efficiency will be achieved through the reinforcement of the existing CMIs where they are established, and their establishment where they don’t yet exist, especially for the corridors managed under RECs. For the 3rd category, CMIs may be established as far as the status and volume of corridor activities can justify such an establishment.

2.1 Enhancing the efficiency of existing CMIs

The existing corridor coordinating authorities in east Africa are generally well performing, but can still better perform and more contribute to improve the respective corridors efficiency. This may be achieved through the reinforcement of the corridor authorities’ capacity in terms of enhanced human, technical and financial resources, as well as an improved institutional framework by granting them a regional mandate and extended scope of mission to all aspects of corridor transport.

To be efficient, a CMI should be a relatively small size but autonomous organization with a technical rather than administrative orientation, involved in regional dialogue on all issues related to corridor development. In terms of activities, the corridor management agencies should concentrate on the key determinant factors of corridor performance, which include the quality and competitiveness of transport and logistics services, the capacity and condition of corridor...
infrastructure and facilities, and the regulations governing the services provision at national, bilateral and regional levels.

The success of a transport corridor depends on the support it receives from the political authorities, the business community at national and regional levels. CMI efficiency requires to be well connected to corridor countries and REC(s), to ensure a full cooperation and support of the various public agencies in charge of infrastructure and facilities, trade and transit legislation, standards, regulations of corridor transport services provision and regulations enforcement in corridor countries and REC(s). Furthermore, CMIs should operate in close cooperation with working committees of senior officials at countries and RECs levels, to address different aspects of transport corridor.

2.2 Different scenario of corridor configuration and management

Transport corridors and RECs may have differences and specificities with regard to their geographic configuration and background, which may require some adjustments in corridor management organization.

2.2.1 Corridors connecting different RECs

A transport corridor may connect countries located in different RECs. This scenario does concern a very few corridors, and generally one or 2 countries in a REC linked to a corridor from a different mother REC. More specifically, this is the case of the northern and Central corridors, linking DRC (COMESA member) and respectively Kenya-Uganda-Rwanda and Tanzania-Rwanda which are EAC members. A similar situation may happen in central Africa when Cameroon-Nigeria or Nigeria-Chad will be linked by a functional transport corridor. The umbrella REC will likely be ECCAS, as Nigeria is not CEMAC member.

The challenge of overlapping 2 RECs is the harmonization of transport policies and regulations that may require the revision of treaties, conventions and legal instruments establishing the different transport corridors. The other option may be the negotiation of a new instrument covering all corridors of an umbrella REC where it exists, like COMESA in East and Southern Africa which includes most EAC, IGAD and SADC member countries. Such option would also require to rethink the appropriate corridor management capacity and organizational structure, taking into consideration the wide territory to be covered, the diversity of corridors and stakeholders, etc.

However, this would be an unnecessary complicated and long process, which would not guarantee the expected efficiency improvement compared to the existing situation, as very few countries would be concerned. The problem can be resolved through the RECs representation to the Corridor Executive Board, and cannot constitute a major challenge since most RECS have similar transport regulations.

2.2.2 Case of NCTTCA and CCTTFA

Both CMIs have demonstrated satisfactory performance and should not be restructured, they can be reinforced and serve as pilot for the creation of CMIs in other regional transport corridors. The specific case of DRC membership to NCTTCA and CCTTFA while it is not EAC member may not be a problem as both corridors terminate in Goma and Bukavu, located at the border with
Rwanda. Furthermore, DRC and EAC member states are also members either of COMESA or SADC, and there no major differences in EAC, COMESA and SADC transport policies and regulations.

2.2.3 Different corridors in the same REC

Different transport corridors may be geographically located in the same REC like ECOWAS and WAEMU in West Africa, which have more than 12 overlapping or interlinked corridors which connect at least 5 maritime ports to the hinterland including 3 landlocked countries (Burkina Faso, Mali, Niger). Some corridors are managed under WAEMU. As WAEMU operates under ECOWAS transport policies and regulations, the problem of harmonization and legal instruments has been resolved.

2.3 Establishment of new CMIs

2.3.1 CMI creation process

The creation of new CMIs requires the establishment of an appropriate institutional and legal framework with a number of legal instruments. The most important is the multilateral/regional agreement between member countries, which depends on the membership(s) of the corridor countries with regard to regional integration. The agreement can be rapidly concluded if they are in the same REC as most policies and instruments are already harmonized. It may take time and require long negotiation processes if they are affiliated to different RECs, as some level of policies and regulations harmonization can be required prior to the conclusion of the agreement.

After the agreement negotiation, the participating countries should assign a mandate to the new CMI, define the legal status, organizational structure, institutional arrangements, clarify funding sources, operational arrangements etc.

Once the legal and operational framework is in place, member countries should allocate resource and make the CMI operational. This includes appointing the management and staffing CMI, setting management systems, logistics, etc.

2.3.2 The case of West Africa: ECOWAS and WAEMU corridors

i. **Assumption**: This scenario is based on the assumption that member states and RECs support the establishment of independent/autonomous CMI. In case RECs and member states prefer to keep corridor management/coordination under RECs Infrastructure/transport department or commission, no performance improvement will be expected. Even if RECs Transport Unit are reinforced, very limited efficiency improvement will be expected, unless sufficient autonomy is granted to the coordination unit.

ii. **REC size and CMI configuration**: West Africa is a huge geographical space with so many transport corridors, most of them are overlapping and physically interlinked. The ideal scenario would be one CMI managing all REC’s transport corridors. However, consideration should be given to the RECs size, it would be quite impossible for one CMI to efficiently monitor/manage 10 corridors across 15 countries or more, unless regional coordination offices under the main CMI are established.
iii. **Staged coordination**: To achieve an efficient geographical coordination and ensure the regional integration dimension is taken into consideration, a leveled corridor coordination mechanism may be required. This may be at both REC and corridor levels, with an overall coordination at REC level (upper level), and a more operational coordination at individual corridor or set of corridors level (lower level). The upper coordination entity may be located at ECOWAS or WAEMU level, but keeping enough autonomy to operate out of the RECs bureaucracy and interference. The geographical configuration of the west African region may suggest Ouagadougou to host the upper coordination structure, as most regional corridors intersect in Ouagadougou, which is also hosting WAEMU headquarters.

The lower level of corridor coordination is more operational and should take into consideration the financial costs of such entities. On an economic point of view, coordinating the set of corridors originated from a same point would be recommended, rather than creating a coordination entity for each transport corridor. It would be advised to base the lower coordination unit in the major regional sea ports, and monitor all the transport corridors connecting the port to the hinterland. In the specific case of West Africa, autonomous CMIs would be established in Lagos, Cotonou, Lome, Accra/Tema, Abidjan, Dakar, and cover all the ECOWAS/WAEMU geographical territory, and report to the upper coordination unit, that reports to WAEMU/ECOWAS.

CMI established in a coastal country would equally cover the other active ports in that country: CMI in Abidjan should also monitor the corridor departing from San Pedro, similarly for Tema and Takoradi, Douala and Kribi, etc. This would stimulate CMIs and ports competition and performance. In Central Africa, the main corridor is Douala-Bangui/Ndjamena, the CMI would be established in Douala and related to CEMAC Commission, unless the development of the new port of Kribi suggests other scenarios.

2.3.3 **CMIs and Corridor status**

The creation of new CMIs should be justified by the status of the corridor, as well as the volume of activities to be monitored and issues to be addressed. Corridors in a formative stage should be managed by steering committees of joint teams composed of experts and senior officials from the corridor countries and RECs, until they become fully operational and justify the establishment of a CMI. ECCAS corridors should continue to be managed under ECCAS, CICOS may be considered as a CMI, Djibouti corridor member countries are already considering the establishment of a corridor authority.

### 3 CMI Human and Financial Resources

#### 3.1 Human resources

With regard to the existing CMIs, the reinforcement of their mandate and mission extension may require some adjustment to the organization structure and staffing. It is recommended to conduct an assessment of the existing capacity and staff skills with regard to the new mandate requirements,
followed by a redeployment of the staff in place and/or appointment of new resources in accordance with the conclusions and recommendations of the capacity assessment report.

3.1.1 Staff profile and skills requirements

To efficiently carry out the corridor management assignments, a multidisciplinary team led by an executive secretary and at least composed of the following experts is required: Transport economist, Highway engineer, Customs expert, Private sector promotion expert, Legal expert, and optionally a Monitoring and evaluation expert and a Statistician. The minimum qualification should be MSc degree or equivalent in their respective specialties, with a minimum professional experience of at least 8 years in the related field of activities. They should be well skilled for leading policy dialogue, providing policy advice and operational/analytical support to RECs and corridor member countries, ability of team working in a multicultural environment, strong skills in project cycle management, and computer applications skills.

**Box 1: The NCTTCA example:**

NCTTCA is led by an Executive Secretary, heading a team of national experts composed of a transport economist, a highway engineer, a customs specialist, a monitoring and evaluation specialist, and a private sector specialist. A unit in charge of administration and finance issues provides cross-support to the whole team, with a pool of support staff composed of secretaries (2), drivers (2) and maintenance assistants (2). Each expert is supported by a local assistant. The Executive secretary office is supported by a translator, a public relations officer and a secretary. Under the transport economist, a statistician and IT specialist are collecting and processing corridor data and producing the transport observatory reports, with the support of TMEA.

3.1.2 Political considerations

Although the CMIs basic mission should be technical, some political elements should be considered, to ensure all corridor countries are well represented in the management structure and fully participate to the corridor decision making processes. A fair distribution of CMI management and expert positions between the countries is highly recommended, especially the position of Executive secretary that should be a rotatory appointment, selected under a restricted competitive process. CMI experts should be selected from different corridor countries under a wide competitive process. The hosting country should provide the local staff, also recruited under a competitive process. Performance contracts for technical experts and staff are recommended, performance evaluation should be periodically conducted to encourage the staff productivity.

3.2 Financial resources: Estimate of annual CMC budget

The following annual budget estimate is indicative, can vary from a region to another, depending on the market prices, especially the labour market.

<table>
<thead>
<tr>
<th>CMI ANNUAL BUDGET</th>
<th>Quantity</th>
<th>Unit Cost (USD)</th>
<th>Total cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF COST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Secretary</td>
<td>12</td>
<td>10 000</td>
<td>120 000</td>
</tr>
<tr>
<td>Transport Economist</td>
<td>12</td>
<td>8 500</td>
<td>102 000</td>
</tr>
</tbody>
</table>
4 CMI funding sources

The sustainability of CMIs funding sources depends on the quality of services they deliver, and how the clients and partners appreciate the benefits drawn, in relation to the resources CMIs are benefiting. The satisfaction of corridor users and services providers will encourage them as well as the other corridor partners to support CMIs, stimulating them to better perform. Funding may come from the public and private corridor stakeholders’ contribution, development partners and/or corridor users levy (levies on cargo traffic).

Considering the unpredictability of member contributions due to the problematic availability of resources, and given the timely limited donor support, usually granted at the formative stage to meet the unit start-up costs, levy on traffic cargo is the most suitable source of funding corridor...
management costs. However, attention should be given to the level of the levy that should not be excessive, and collected in a way which does not negatively affect the corridor transport operations.

CMIs and member countries should explore other source of funding to complement the levy on import cargos. This may be the levy on export cargos, as well as on the intra-trade cargos. However, the structure of most regional economies is marked by an unbalanced trade, with about 10% exports against 90% imports. Therefore, expectations from the levy on export cargos would not be significant, while expectable revenues from the intra-trade cargo may be more important. As the levy on intra-trade cargos can’t be collected from the port as it is for the levy on import or export goods, CMIs and member states can propose a collection method for the levy on intra-trade cargo, and identify the most indicated agencies for such a mission, and defining the operational framework.

The other source of funding may be the RECs in case they recognize the positive role of CMIs and assign them the regional mandate to coordinate corridor activities. As CMIs will be implementing activities previously under the RECs transport units, and generating useful information to be exploited by RECs, RECs may contribute to the CMIs budget and advocate for sustained sources of funding with member states, including the establishment of an appropriate level of the levy on cargos. However, RECs contributions may face the same unpredictability as the corridor member countries.

Box 2: NCTTCA funding mechanism and budget

NCTTCA budget is basically funded by the contribution of corridor member states, distributed as follows: Kenya (30%), Uganda (25%), DRC (15%), Rwanda (10%), Burundi (5%) and South Sudan (15%). The major funding mechanism for all corridor member countries is the levy on transit cargo, except Kenya which directly pays its part through the treasury. The levy is directly collected at the port of Mombasa. Although the cargo levy is the most sustainable mode of financing the corridor coordination authority, it depends on the country economic performance. In case the country imports decline, the levy declines accordingly, and the concerned countries are obliged to increase the levy and/or to complement their contribution from their respective departments of treasury. As an illustrative example, the import cargo levy in 2015 was about US$ 0.2/ton for Uganda, while it is US$ 0.6 for Rwanda, and around US$ 1 for Burundi and South Sudan. The decline of country economic performance can constitute a risk for the authority budget, especially in case some member countries are facing conflicts, insecurity or economic difficulties which slow down the national import-export activities and reduce the above levy.

In addition to the levy on transit cargos and contributions from member countries, NCTTCA also benefits from external donors support. However, the countries contributions are generally unpredictable, while the external donors support is timely limited, generally granted to start up the coordinating authority, or allocated to implement some specific project activities. Donor support to NCTTCA is currently estimated at 4 to 5% of the budget, especially from Trade Mark East Africa (TMEA), the African Development Bank and the World Bank. Over the last years, NCTTCA has expanded size and scope of activities, and consequently the budget to respond to new challenges. The annual budget progressively increased from USD 1.2 Million in the past to about USD 3 Million. The increment was due to different priority projects funded under internal resources while they used to be supported under external donors. Examples of NCTTCA projects are the construction of rest stops along the corridor, the preparation of NCTTCA strategic plan, the Geographical Information System (GIS), the transport observatory etc. The individual project average cost is estimated to US$ 300,000 per year.

In terms of activities, the port of Mombasa is handling about 26 million Ton/year, which include 90 % of import, against 10% export, meaning about 23.4 million Ton/year and a levy of US$ 4.7 Million if we fix the levy at US$ 0.2/ton cargo for all participating countries (ignoring the transit to Ethiopia and north Tanzania which is not really significant). Domestic import represents about 75% of the total port import activities. The total resources generated
by the levy on import cargo is estimated to USD 2.4 Million per year in normal conditions. As Kenya is contributing for about US$ 1 million, NCTTCA can expect to mobilize an annual contribution of about US$ 3.4 million member countries if all of them timely fulfill their obligations.

The NCTTCA approach and experience has inspired the Central Corridor Facilitation Agency. CCTTFA operating costs are equally funded through the levy on transit cargo, that has been fixed at $ 0.3 per ton cargo for each participating country. As the port capacity is 10 Million ton/year, CCTTFA can mobilize about US$ 2.7 Million through the levy on import cargo, assuming 90% import against 10% export. The agreement does not provide for member countries contribution, nor donor support as it is for NCTTCA, which makes the agency funding more predictable and sustainable. However, the agency still benefits resources from external partners (essentially TMEA), but its budget is funded by the levy up to 98%.

5 Institutional Framework and Organization

5.1 Corridor interveners

Transport corridors activities involve several stakeholders from the public and private sectors at both national and regional levels. Different countries and government agencies are involved at different levels in corridor development activities, while a number of private operators are providing transport and logistics services on the corridor. It is therefore imperative to ensure that the corridor management takes as much as possible into consideration the views and interests of the different actors, and facilitates them to efficiently play their roles.

5.2 Roles of corridors stakeholders

It is important to clearly define the roles and responsibilities of each actor involved in corridor activities, and create an enabling environment to optimally achieve their goals. A clear definition will avoid the risk of duplication and/or conflicts, ensuring complementarity and synergies between corridor member states, RECs, CMIs and the private actors.

RECs are responsible for regional policies harmonization and implementation. They provide to member states and implementing agencies the guidelines for a harmonized implementation of transport policies and programs at national level.

Corridors countries and REC member states are responsible for the definition of transport policies and planning, and ensure that they are implemented.

CMIs should be responsible for coordination of corridor management and development activities. They may advise or propose programs and projects which can improve the corridor efficiency, as well as any other initiative which can contribute to achieve the regional objectives with regards to transport corridors.

The private sector is responsible for logistics and transport services provision on the corridors.

5.3 Recommended CMI organizational structure

Corridor management is most effective where a permanent and autonomous entity (generally an executive secretariat) is established, with an executive board and a consultative assembly which include the key private and public stakeholders’ representatives.
The executive board should be responsible for general principles and policies governing the corridor authority. It should provide guidance to the secretariat on strategic orientations for transport and trade facilitation, infrastructure development, harmonization of national policies, etc. The board should report to a higher instance and policy making body, generally the Council of Ministers in charge of Transport matters or regional integration in member countries.

The Executive Secretariat should be responsible for coordinating the implementation of the Corridor Agreement, as well as any other decisions and resolutions made by the Council of Ministers and the Executive Board.

Specific technical committees may be created to advise the Secretariat and the Executive Board on the key pillars of the corridor policies and programs. The committees may be constituted around the strategic areas of transport policy and planning, infrastructure development and management, customs and transit facilitation, private-public partnership.

Indicatively, the Executive Board may include member states representatives from ministries in charge of transport and private sector (transporters representative), RECs representatives from the Transport and Trade Departments, Port representative and the CMI Executive secretary acting as the board secretary.

CMIs although autonomous are recommended to report to the RECs, rather than being standalone organizations reporting to corridor countries only, especially if the corridor countries are in the same RECs. If the corridor participating countries are not in the same RECs, CMI should not be affiliated to only one REC, member countries should ensure that all involved RECs are represented at the Corridor executive board.

### 6 Conclusions and Recommendations

Transport corridors in Central and West Africa are managed under RECs units in charge of transport matters, while they are coordinated under corridor authorities in East Africa. The establishment of autonomous corridor management institutions (CMIs) to manage the corridor activities would certainly improve the corridor performance and contribute to reduce the transport costs and delays. Some countries and/or RECs may opt for improving the REC’s Transport departments rather than establishing new CMUs, but this option would not bring any significant value added to the prevailing situation. To be efficient, it is recommended such agencies to be autonomous, light structures, empowered with a regional mandate and the required capacity. Depending on the geographical configuration of RECs, different scenarios may be considered, that include the status quo for the existing east African CMI, and the establishment of CMIs in West and Central Africa. The recommended major source of funding CMIs activities is the levy on cargo, which is more sustainable than all other available sources. The establishment of CMIs would provide RECs and member countries with a critical instrument for improving corridors performance and ensuring the implementation of regional transport policies and strategies with regard to corridors.
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MODULE 10 CORRIDORS MANAGEMENT INSTITUTIONS (CMIs)

Report 10.2 Financial & Human Requirements for effective functioning of the CMIs

By Gilbert Mbae Maeti

Table of Contents

Acronyms ............................................................................................................................................ 2

1 Introduction ....................................................................................................................................... 3

1.1 Background to Corridor Development ....................................................................................... 3

1.2 The Purpose of the Corridor Guidelines .................................................................................... 4

2 Current Financing Mechanisms and Human Resources Deployment for Corridor Institutions in Africa .................................................. 4

2.1 Financing of Transport Corridors in Southern Africa .............................................................. 4

2.2 The Role of Human Resources in the Effective Functioning of CMIs ..................................... 7

2.3 Experiences of CMIs from ESA and Rest of Africa ................................................................. 9

3 Proposed Guidelines on the Financial and Human Resources Required to Ensure Effective Functioning of Corridor Management Institutions ........................................................................ 10

3.1 Structure of the Guidelines ........................................................................................................ 10

3.2 Guidelines on Financial Resources .......................................................................................... 11

3.2.1 Key Elements on Sustainable CMI Financing Modalities ................................................. 11

3.2.2 Restructuring of Financing Modalities if Prevailing ones are not Sustainable .............. 12

3.2.3 Preparation of Budget Estimates for CMI Operations ..................................................... 12

3.2.4 Identifying Potential Sources of Funding for CMIs .......................................................... 13

3.3 Human Resources ...................................................................................................................... 13

3.3.1 Key Competencies for CMIs Staff Members ...................................................................... 13

3.3.2 Capacity Building in CMIs .................................................................................................. 14

3.3.3 Proposed CMI Organisational Charts .............................................................................. 14

3.3.4 Job Specifications for CMIs Staff ...................................................................................... 15

4 Annex .......................................................................................................................................... 16
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>ACMA</td>
<td>African Corridor Management Alliance</td>
</tr>
<tr>
<td>CCTTFA</td>
<td>Central Corridor Trade and Transport Facilitation Agency</td>
</tr>
<tr>
<td>CMI</td>
<td>Corridor Management Institution</td>
</tr>
<tr>
<td>DBSA</td>
<td>Development Bank of Southern Africa</td>
</tr>
<tr>
<td>DCC</td>
<td>Dar es Salaam Corridor Committee</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>KPIs</td>
<td>Key Performance Indicators</td>
</tr>
<tr>
<td>MCLI</td>
<td>Maputo Corridor Logistics Initiative</td>
</tr>
<tr>
<td>NCTTCA</td>
<td>Northern Corridor Transit Transport Coordination Authority</td>
</tr>
<tr>
<td>PMAESA</td>
<td>Port Management Association for Eastern and Southern Africa</td>
</tr>
<tr>
<td>PTA Bank</td>
<td>The Eastern and Southern African Trade and Development Bank</td>
</tr>
<tr>
<td>SSATP</td>
<td>Sub Saharan Africa Transport Programme</td>
</tr>
<tr>
<td>TCC</td>
<td>Trans Caprivi Corridor</td>
</tr>
<tr>
<td>TKC</td>
<td>Trans Kalahari Corridor</td>
</tr>
<tr>
<td>WBCG</td>
<td>Walvis Bay Corridor Group</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Background to Corridor Development

The Corridor approach has been adopted globally as an effective trade and transport logistics delivery model to transport goods and move transport equipment over territorial confines and across international frontiers. It has therefore become a popular model to address the endemic challenges facing trade and transport logistics in the African continent. The Programme for Infrastructure Development for Africa referred to as PIDA\(^1\) adopts the corridor approach in the delivery of the planned continental transport infrastructure connectivity.

It largely adopts the transport corridors identified in the various initiatives undertaken to develop transport links to boost continental integration through economic and social interactions. It encompasses a multidisciplinary approach that deals with transport infrastructure, provision of transport services.

The primary role of the transport corridor is to reduce the cost of conducting trade across two or more countries through the provision of connected transport infrastructure along designated routes and applying a set of harmonized trade and transport facilitation instruments. In this respect, the Corridor system by reducing the transport logistics costs also facilitates movement of persons, enhances regional economic integration and promotes economic growth among the interconnected countries and regions.

While over the past two decades, the transport corridors established in the continent have accorded priority on enhancing interconnectivity and facilitating trade, the White Paper has embraced the concept of Smart\(^2\) Corridors where emphasis has been put on providing Intelligent Transport Systems (ITS) to enhance improvements to trade facilitation policies, along with harmonized upgrading of all the transport modes along the corridor.

The Smart Corridor approach entails the use of cross-border ITS technologies, WTO / WCO trade facilitation tools, REC agreed trade facilitation policies, laws, regulations, procedures and safety measures; and quality transport infrastructure.

The African Union (AU) has prioritized infrastructure in transport, energy, ICT and trans-boundary water resources as a critical item in achieving the goal of continental economic and social integration. The AU is preparing a White Paper on Transport Policy\(^3\) that sets out the policy actions in line with the PIDA priorities that seeks to address the continental transport physical infrastructure connectivity together with accompanying logistics by underscoring the role of transport corridors as facilitators of integration and spatial development on the African continent.

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1 The PIDA Programme is the final outcome that culminated from the Short term and Long term Infrastructure Action Plans under the NEPAD Initiative

2 Provided in the AU Draft White Paper

3 The AU White Paper is in draft form and is expected to inform on the preparation of various transport sector Guidelines.
The White Paper covers four cross cutting and five modal transport areas. The cross cutting policy areas include the following:

- Improvement of regional and continental connectivity;
- Development of a sustainable transport system that is friendly to the environment;
- Improvement of governance of the transport sector; and
- Institutional frameworks

The modal transport policy areas include, Road Transport Services, Rail Transport, Waterborne transport, Air Transport; and Multimodal Transport. On surface transport, the African Union has prioritised the development of transport corridors consisting of designated transport routes and intended to facilitate both regional and international trade.

1.2 The Purpose of the Corridor Guidelines

The Corridor Management Institutions (CMIs) established to manage the transport corridors in the Eastern and Southern Africa region have had varied experiences with respect to organising their financial and human resources in order to effectively and sustainably discharge their mandates.

The scope of this paper is to produce a set “operating instructions” with the required information to recommend the establishment of CMIs when they don’t exist or to strengthen them when they already exist making reference to Southern Africa. The expected output is to develop guidelines on Financial and human resources required to ensure effective functioning of the CMIs.

The guidelines will provide reference material on financial and human resources matters when setting up new CMIs or while restructuring existing ones that may not be functioning effectively.

2 Current Financing Mechanisms and Human Resources Deployment for Corridor Institutions in Africa

2.1 Financing of Transport Corridors in Southern Africa

The SADC region constitutes the primary hinterland served by the Southern Africa transport corridors. The corridor development and management in the SADC region is guided by the dictum of “Instruments, Institutions, Infrastructure and Implementation” which is in line with the organisation’s Protocol4 dealing with the development, utilisation and management transport and ICT infrastructure and provision of services.

The eleven main corridors serving the Southern Africa region originate from the ports of Dar es Salaam, Mtwara, Nacala, Beira, Maputo, Durban, Walvis Bay, Namibe and Lobito. Out of these main corridors, four namely; Dar es Salaam, Maputo, Trans Kalahari and Trans Caprivi already have functional Corridor Management Institutions (CMIs). The remaining ones namely; North

---

4 The SADC Transport, Communications and Meteorology Protocol
South Corridor, Trans Cunene, Namibe and Lobito/Benguela which have also adopted the MOUs as their enabling instruments are at various stages of negotiating and concluding these instruments with facilitation from the SADC Secretariat.

Once a CMI is set up for a corridor, it creates an operating institution which has an annual budget in order to carry out its work programmes. The financing of the budget in a CMI is an important issue. This is in order to ensure that the CMI generates sufficient resources to ensure its sustainability over time. The funding for CMIs in Southern Africa is through a combination of member states contributions, contributions by private stakeholders and through grants extended by development banks and aid provided by cooperating partners. In East Africa funding mechanisms have evolved to include payments through cargo levies, government contributions and grants from partners.

The issue of sustainable funding for the CMIs in Southern Africa has been of great concern because the existing CMIs in the Dar es Salaam, Maputo and Walvis Bay corridors have not been able to raise sufficient funds to cover their annual work programmes. In the case of Dar es Salaam Corridor, contributions from the members who are signatories to the Constitution have not been able to meet their assessed contributions.

Similarly, for the Maputo Corridor, only the twelve founding members have managed to meet their financial obligations while the other members have not managed to meet their assessed contributions. In the North South Corridor, negotiations to conclude an MOU covering South Africa, Botswana, Zimbabwe, Malawi, Zambia and Congo DR have been long drawn because the issue of the funding mechanism has not been agreed upon. Once the funding mechanism is agreed upon, MOU should be concluded and signed.

Table 2.1 below, shows the corridors in Southern Africa and the funding mechanisms for those with CMIs.

<table>
<thead>
<tr>
<th>Corridor Name</th>
<th>CMI Name (Executive Agency)</th>
<th>Enabling Instrument</th>
<th>Funding Mechanism</th>
<th>Participating States</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dar es Salaam Corridor</td>
<td>Dar es Salaam Corridor Committee (DCC)</td>
<td>Constitution</td>
<td>Member contributions (^5)</td>
<td>Tanzania, Malawi, Zambia and Congo</td>
<td>The 4 participating states developing an MOU for signature</td>
</tr>
<tr>
<td>Maputo Corridor</td>
<td>Maputo Corridor Logistics Initiative (MCLI)</td>
<td>Company Registration</td>
<td>Member contributions</td>
<td>Mozambique, South Africa and Swaziland</td>
<td>MOU between Mozambique/ South Africa on corridor development</td>
</tr>
<tr>
<td>Trans Kalahari Corridor</td>
<td>TKC Secretariat</td>
<td>MOU</td>
<td>Member contributions</td>
<td>Namibia, Botswana and South Africa</td>
<td>MOU signed by Namibia, Botswana and South Africa</td>
</tr>
</tbody>
</table>

\(^5\) The DCC is exploring alternative funding models, including user pay system, as current system is unsustainable
### Table 2.1. Corridors in Southern Africa

An evolution of funding mechanisms for CMIs in Eastern and Southern Africa can be traced from the experiences of the Northern Corridor. The Northern Corridor was established in 1986 through an intergovernmental agreement entered by beneficiary states. It had the relevant governance structures and an executing agency with dedicated staff. Initially the regular budget was funded through direct contributions by the four partner states assessed on the basis of the levels of traffic passing through the port of Mombasa.

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Group/Institution</th>
<th>MOU</th>
<th>Cargo levy but currently funded by WBCG</th>
<th>Beneficiary States</th>
<th>MOU signed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trans Caprivi Corridor</td>
<td>Walvis Bay Corridor Group</td>
<td>MOU</td>
<td>Cargo levy but currently funded by WBCG</td>
<td>Namibia, Zambia and Congo DR</td>
<td>MOU signed by Namibia, Zambia and Congo DR</td>
</tr>
<tr>
<td>Mtwara Corridor</td>
<td>Mtwara Dev Corridor</td>
<td>MOU</td>
<td>Tanzania, Malawi Mozambique, Zambia</td>
<td>MOU signed by Tanzania, Malawi, Mozambique</td>
<td></td>
</tr>
<tr>
<td>Nacala Corridor</td>
<td>Nacala Logistics Corridor (NLC)</td>
<td>MOU</td>
<td>Mozambique, Malawi and Zambia</td>
<td>MOU Mozambique, Malawi, Zambia</td>
<td></td>
</tr>
<tr>
<td>Beira Corridor</td>
<td>Beira Corridor Group</td>
<td>MOU</td>
<td>Mozambique, Zimbabwe, Zambia</td>
<td>MOU signed by Mozambique and Zimbabwe</td>
<td></td>
</tr>
<tr>
<td>North/South Corridor</td>
<td>NSC Secretariat</td>
<td>MOU</td>
<td>Negotiations funding mechanisms</td>
<td>DRC, Botswana South Africa, Zimbabwe, Zambia</td>
<td>Negotiations ongoing with the funding mechanism as contentious issue</td>
</tr>
<tr>
<td>Trans Cunene Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Not yet determined</td>
<td>Namibia and Angola</td>
<td>SADC to initiate and facilitate negotiations</td>
</tr>
<tr>
<td>Namibe Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Not yet determined</td>
<td>Angola and Zambia</td>
<td>SADC to initiate and facilitate negotiations</td>
</tr>
<tr>
<td>Benguela/Lobito Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Not yet determined</td>
<td>Angola, Congo DR and Zambia</td>
<td>SADC to initiate and facilitate negotiations</td>
</tr>
</tbody>
</table>

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6 MOU signed in 2010 but though Secretariat not yet established, corridor is administered by the Walvis Bay Group

7 Governance institutions provided under the MOU but not operational but a consortium headed by Vale of Brazil and Mozambique CFM North has initiated a corridor management entity

8 Governance institutions provided under the MOU but not yet operational

9 The founding members of the Northern Corridor are Burundi, Kenya, Rwanda and Uganda while DRC and South Sudan acceded to the Agreement.
However, in a few years, most of the partner states started falling into accumulated arrears in their contributions necessitating a review of the funding mechanism. Following a study undertaken on behalf of the NCTTCA, a recommendation for the introduction of a cargo levy\footnote{The Cargo Levy is also referred to as a Tonnage Levy} was adopted by Burundi, Congo DR, Rwanda and Uganda while Kenya opted to continue with direct contributions from its treasury.

Following the establishment of the Dar es Salaam Corridor CMI, an institutional and financial sustainability study\footnote{Dar es Salaam Corridor Institutional Sustainability Study; Chemonics International, Inc., 2004} was conducted and came up with the following observations about the mechanisms of funding the CMIs:

- Membership contributions are generally problematic whether by the private or public sector. In particular, governments have competing and more urgent priorities making it difficult for them to keep up with their assessed contributions to the CMIs;
- User levies if applied would have to be directly related to the derived benefits. What the users pay must be less than the derived benefits;
- Where there is no clear linkage between the budget and the results or benefits, it becomes difficult to justify the levy;
- Where there is result-based budgeting with clear targets for deliverables, justification for a levy is not difficult; and
- The mode of collection of the levy need to be simple to administer and to be amenable to adherence.

The findings from both the Northern Corridor and Dar es Salaam Corridor have informed on the need to adopt a funding mechanism that generates a predictable and steady flow of funds to enable the CMI to finance its work programmes.

\textbf{2.2 The Role of Human Resources in the Effective Functioning of CMIs}

In addition to the governance structures provided for in the establishment of the CMIs, an executing agency designated as the Secretariat has usually been in most occasions established with permanent staff headed by a Chief Executive.

The human resources factor is crucial to the effective functioning of the CMI. This is because the competency of the CMI staff will determine the quality of work undertaken in support of the corridors through the various work programmes. The effective functioning of the corridor will depend on the availability and deployment of skilled and personnel with the requisite skills and experience to discharge their responsibilities in line with their respective mandates.

The CMIs personnel will need to be equipped with skills and experience on issues related to policy, transport infrastructure, transport logistics, Customs procedures, transit documentation and financial...
management. The same personnel will further need to be able to take part in setting performance indicators, collect data to monitor performance by various service providers, engage national policy makers, regulatory authorities and carry out advocacy. In this respect, a review of the existing Corridor Secretariat establishments will be undertaken and where necessary revised establishments will be prepared providing for personnel with relevant competencies to meet organisational shortfalls.

The Secretariat’s members of staff are recruited in accordance with the skills and experience required to perform the tasks provided for under an organizational structure which constitutes the Secretariat’s establishment. The establishment contains the list of positions which contain job descriptions and have to be filled by experts with the requisite qualifications, skills and experience.

In the case of the NCTTCA is a permanent Secretariat headed by an Executive Secretary established in Mombasa in 1988. It had experts in Customs, Transport Economics and Civil Engineering as professional experts supported by professionals in finance and general support staff. The staffing of the NCTTCA Secretariat was gradual as it initially was being through secondment of staff from member states and eventually recruiting its own permanent staff on its own terms and conditions of service.

The Dar es Salaam Corridor started with the recruitment of the Corridor Chief Executive who was initially provided with support staff from the Tanzania Ports Authority with the intention of eventually recruiting dedicated staff when its funding was fully operational.

The Secretariat facilitates implementation of the policy organs decisions and provides secretarial services to all the organs of the CMI. The Secretariat is obligated to;

- Prepare work programmes, budgets and schedules of events for consideration by the policy organs;
- Undertake research, analysis and prepare technical papers for consideration by member states or for public briefings;
- Monitor the progress of the implementation of various aspects of the Agreement and determine the impact thereof;
- Identify problems or impediments and propose measures that should be taken to overcome them;
- Provide technical facilitation on the business of the policy and other CMIs organs; and
- Prepare and propose regulations, manuals and other programme implementation instruments.

The staffing of the secretariat is also expected to consider other issues such as languages used by the corridor states which may necessitate documents translation in order to facilitate effective communication across the hinterland. The Secretariat’s structure is therefore responsive to the
corridor critical needs. Table 2.2 below provides a sample distribution of Human Resource by skills in Selected CMIs

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Chief Executive</th>
<th>Professional Experts</th>
<th>Support Experts</th>
<th>General Staff (Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCC</td>
<td>Executive Secretary</td>
<td>Trade Transport Marketing Lobbying</td>
<td>Coordination Finance/Accounts Procurement, Information Conferences</td>
<td>Secretarial Record keepers Others</td>
</tr>
<tr>
<td>MCLI</td>
<td>Chief Executive</td>
<td>Chief Operating Officer</td>
<td>ICT and Administration Manager, Event Administrators</td>
<td>Administrative Assistants (2)</td>
</tr>
<tr>
<td>TKC</td>
<td>Executive Director</td>
<td>Transport Expert Customs Expert</td>
<td>Office Administrator</td>
<td></td>
</tr>
<tr>
<td>TCC</td>
<td>Executive Secretary&lt;sup&gt;12&lt;/sup&gt;</td>
<td>Experts in transport, Customs and Marketing</td>
<td>Office Administrator</td>
<td></td>
</tr>
<tr>
<td>NCTTCA</td>
<td>Executive Secretary</td>
<td>Trade Transport Civil Engineer</td>
<td>Coordination Finance/Accounts Procurement M&amp;I, IT Conferences</td>
<td>Secretarial Records Others</td>
</tr>
<tr>
<td>CCTTFA</td>
<td>Executive Secretary</td>
<td>Trade Transport Civil Engineer Marketing</td>
<td>Coordination Finance/Accounts Procurement IT, Conferences</td>
<td>Secretarial Records Others</td>
</tr>
</tbody>
</table>

Table 2.2: Human Resource Distribution in Selected CMIs

Capacity building for CMIs is important for both incumbent and for newly recruited members of staff. This capacity building can be achieved through direct induction or through joint training provided with support from entities such as the ECA, World Bank SSATP, NEPAD, PMAESA. Capacity building could also be enhanced through visits secondment to each other and generally direct sharing of information and experiences. Currently a programme of deeper cooperation among African corridors is being developed through the African Corridor Management Alliance (ACMA)

2.3 Experiences of CMIs from ESA and Rest of Africa

The experiences of providing and managing financial and human resource in Eastern and Southern African CMIs can be reviewed and benchmarked against each other, with the those in the African continent and with the rest of the world. The CMIs in the Eastern and Southern Africa can be provided for the following cases:

- The Northern Corridor covering which had support from founding Partner States and has experience in restructuring of funding mechanisms and the deployment of requisite experts;

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<sup>12</sup> These are proposed positions as the WBCG provides all secretarial staff to the TCC.
• The Maputo Corridor Logistics Initiative which had support of champions in Mozambique, South Africa and Swaziland;
• The Trans Kalahari Corridor which had the support of policy makers and users in Namibia, Botswana and South Africa and especially the Walvis Bay Group; and
• The Trans Caprivi Corridor which had the support of policy makers and users in Namibia, Botswana and Zambia and especially the Walvis Bay Group

With respect to the above, the Northern Corridor (NCTTCA) is an appropriate case with a track record of facilitating trade and transport among its six member countries namely; Kenya, Uganda, Rwanda, Burundi, Congo DR and lately South Sudan.

The NCTTCA established in 1986 has a wealth of experience in both successes and shortfalls and has had to respond to its challenges by reviewing its enabling intergovernmental agreement, its organizational structure and its funding mechanisms. In 2014, the NCTTCA regular budget amounted to US$ 3 million of which 52% was expended on programme and 37% on personnel. The regular budget was raised through cargo levy from its five partner states and a direct contribution by Kenya. According to the budget contributions formula, Kenya pays for 30 per cent of the regular budget. NCTTCA has extra budgetary resources provided through grants and usually spent on projects and capacity building. In 2014, extra budgetary resources amounted to us$ 1.4 million.

The Maputo Corridor Logistics Initiative (MCLI) is a pioneering example of a CMI in Southern Africa which has been working to facilitate trade and transport within the three beneficially countries namely: Mozambique, South Africa and Swaziland. The MCLI has formal institutional structures covering its governance and a staffed executing agency established through company registration. Its financing mechanism has gone through reviews because of challenges it faced in raising revenue to meet its budgetary requirements.

The cumulative reports on the financial status of the MCLI indicate that due to the failure by private members to honour their assessed annual contributions, its programmes could not be fully implemented as the financial resources came only from the twelve founding members.

The latest accounts indicate that in 2011, MCLI had an operating revenue of about US$ 375,000. This is a modest sum compared with the NCTTCA primarily because the MCLI has a thin establishment and its scope of coverage in terms of programming is not as wide as that of NCTTCA.

3 Proposed Guidelines on the Financial and Human Resources Required to Ensure Effective Functioning of Corridor Management Institutions

3.1 Structure of the Guidelines

The main purpose of this paper is to prepare guidelines to facilitate the development, establishment of financial and human resources required to ensure effective functioning of corridor management institutions.
In the existing CMIs, funding for the core operating budget is normally through cargo levies on both exports and imports or through direct contributions by member states assessed on the basis of the volumes of traffic passing through the maritime ports. The resources for the funding of corridor projects has also been provided by cooperating partners who include multinational development banks, agencies and aid from development agencies of developed countries.

This chapter will contain guidelines on developing and implementing sustainable financing mechanisms and establishing a robust system of handling the human resources component of the CMIs. The following issues will be considered when dealing with financial mechanisms for funding the corridors:

- Key Elements on Sustainable CMI Financing Modalities;
- Restructuring of Financing Modalities if Prevailing ones are not Sustainable;
- Preparation of Budget Estimates for CMI Operations; and
- Identifying Potential Sources of Funding for CMIs

The following issues will be considered in planning, deployment and management of the human resources element for specific corridors:

- Key Competencies of Experts to Manage and Operate Successful CMIs;
- Proposed CMI Organisational Chart; and
- Job Specifications for CMIs Staff;

3.2 Guidelines on Financial Resources

3.2.1 Key Elements on Sustainable CMI Financing Modalities

In order to ensure sustainable financing of the CMIs in order to discharge their functions, the following are key issues:

- A reliable source of funding to provide steady flow of income to meet the regular budget of the CMI;
- An easy and inexpensive method of collection and transfer of funds to the Secretariat;
- Secondary sources of funding especially from developing banks and cooperating partners to be applied for projects development, procurement of equipment and capacity building;
- The funding mechanism should be equitable to stakeholders so that no one shoulders a disproportionate share of the budget;
- The contributions made to the CMI should be commensurate with the services it provides to beneficiaries and should make stakeholders better off than if the CMI was not in existence.
A funding mechanism to be adopted by a CMI should guarantee it steady and sufficient budget to meet its core operating budget

3.2.2 Restructuring of Financing Modalities if Prevailing ones are not Sustainable

The broad elements on the funding mechanisms for CMI’s operations may be provided for in the enabling instrument. However, leeway needs to be given to enable the policy organs to review existing funding mechanisms and revise them where necessary in order to collect sufficient resources so as to provide for the levels of budget adequate to fund their activities.

In this respect, it is important for the CMI to develop a funding mechanism which will provide a steady and adequate budget to finance its work programmes. Where the financing modality adopted for a CMI does not yield a steady and reliable flow of budgetary resources to pay for the discharge the functions of the Secretariat, it is necessary to examine other options for the raising of funds.

In the ESA region, the Northern Corridor, Dar Corridor, MCLI and Trans Kalahari corridors initially started with direct budget contributions by member states to the CMIs but due to non-remittances by the states, they found themselves in arrears within a few years.

Due this challenge some Corridors undertook some reviews to restructure their financing mechanisms and some have already adopted cargo levy options while others have made recommendations to adopt it. The CCTTFA, Nacala and Beira CMIs have adopted the cargo levy at ports or other appropriate collection methodologies as the applicable funding mechanisms.

The following measures will be undertaken in order find the best options to take if funds are not forthcoming:

- Identify the causes of the inability to pay by the various stakeholders who have been accessed;
- Determine a steady, reliable and adequate source of funds;
- Review the modalities of collection of the resources;
- Arrange for the collection of cargo levies at ports or inland locations such as weighbridges;

3.2.3 Preparation of Budget Estimates for CMI Operations

It is standard practice for the CMIs to prepare Strategic Plans which are usually implemented through annual work programmes. In order to implement the work programmes successfully by meeting both recurrent and development budgetary resources, it will be important for the CMIs to be availed stable and predictable sources of funding.

The budgetary resources for the respective CMIs will be based on their needs to implement their work programmes. It is therefore important for the CMIs to prepare budget estimates to implement their Strategic Plans through the annual wok programmes.
The regular budget which is usually raised from contributions by member states should be adequate to cater for CMIs annual operating expenses or the “core expenses”. If the regular budgetary contributions from the cargo levy or members is not sufficient to meet the core expenses, then a review of the applicable rates or the sources of funding will need to be undertaken.

Grants from development and cooperating partners when available should be used to fund projects and some types of equipment and capacity building.

3.2.4 Identifying Potential Sources of Funding for CMIs

The sources of funding for CMIs can vary but the primary ones are:

- Members States;
- Stakeholders (Direct Beneficiaries);
- Development Banks;
- Cooperating Partners; and
- Other Sources

A summary of Sources of Financing for CMIs in the Eastern and Southern Africa region is provided on Table 3.2 below.

<table>
<thead>
<tr>
<th>Funding Entity</th>
<th>Source of Funds</th>
<th>Method of Payments</th>
<th>Recommended Area of Utilisation</th>
<th>Examples in ESA Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member States</td>
<td>National Budgets</td>
<td>Direct annual Contributions</td>
<td>Core CMI operations</td>
<td>NCTTCA, TKC</td>
</tr>
<tr>
<td>Stakeholders (Direct Beneficiaries)</td>
<td>Cargo passing through Corridors</td>
<td>Cargo levy</td>
<td>Core CMI operations</td>
<td>NCTTCA, CCTTFA,</td>
</tr>
<tr>
<td>Corridor Members</td>
<td>Member’s Incomes</td>
<td>Assessed Annual Fees</td>
<td>Core CMI operations</td>
<td>Dar Corridor, MCLI,</td>
</tr>
<tr>
<td>Development Banks (AfDB, World Bank)</td>
<td>Grant Allocations</td>
<td>Grants</td>
<td>Projects, equipment and capacity building</td>
<td>NCTTCA, CCTTFA,</td>
</tr>
<tr>
<td>Cooperating Partners (EU, JICA, USAID)</td>
<td>Foreign Aid</td>
<td>Grants</td>
<td>Projects, equipment and capacity building</td>
<td>Dar Corridor, NCTTCA,</td>
</tr>
<tr>
<td>Other Sources</td>
<td>Gifts</td>
<td>Gifts</td>
<td>Projects, equipment</td>
<td>MCLI</td>
</tr>
</tbody>
</table>

Table 3.2. Sources of Funding for CMIs in the EASA Region

3.3 Human Resources

3.3.1 Key Competencies for CMIs Staff Members

The CMI requires people of relevant skills and experiences at the governance and Secretariat’s levels in order to deliver on its mandates. At the level of governance where policy making organs for the CMIs are involved, it is important to appoint people with good grounding in policy, regulatory and operational understanding of transport and trade issues.
At the Secretariat, level, the staff to be appointed to manage programmes should have clearly demonstrated understanding and experience in Customs, transport infrastructure, regulatory matters and trade and transport logistics. Other support staff dealing with accounts, administration, public relations, ICT and other organisational requirements will also be necessary.

3.3.2 Capacity Building in CMIs

The provision of trans boundary transport is complex operation involving a large number of players, trans frontier movements of goods and means of transport. It is also a dynamic exercise facing and adapting to changes in transport and processes and procedures. Due to this, it is important to provide training of personnel in the CMIs as follows:

- Provide training through induction of new CMI employees to be familiar with the national and cross border trade and transport procedures and the need to minimise bottlenecks;
- Provide refresher training to incumbent staff in order to keep abreast with new developments in trade and transport facilitation;
- Provide familiarisation to policy makers on developments in Corridor transport processes and procedures; and
- Provide sensitisation to various stakeholders including economic operators on the existing processes and procedures or on those proposed and in the pipeline

3.3.3 Proposed CMI Organisational Charts

There are variant organisational structures for CMIs depending on the scope of work that each corridor is mandated to perform by its enabling instruments. While there exist many commonalities in the organisational structures among CMIs, additional functions in mandates will require specialist expertise in order to discharge such functions.

On the basis of the CMIs mandates, two proposed versions of an organisational charts are shown below:
3.3.4 Job Specifications for CMIs Staff

The job specification will illustrate what the manpower deployed in CMIs needs to be in possession of in terms of his skills, experience and attitudes.

Note:

The job profiles for the positions listed above will be provided once collated from inputs received from the major functional CMIs in the Eastern and Southern Africa region.
Annex

Annex 1 Glossary of the Main Concepts Used in the two Reports

The glossary of the main concepts to be employed in the two reports will be provided together with the list of abbreviations and acronyms.

Annex 2 List of the Main Reference Documents Consulted

The list of documents consulted will include the following among others:

(i) CMIs enabling instruments such as treaties, agreements, MOUs and constitutions;
(ii) CMIs visions, missions, strategic plans and annual reports;
(iii) CMIs Organisational Charts;
(iv) CMIs Annual Operating and Capital Budgets;
(v) CMI Staff and Financial Rules; and
(vi) List of articles covering corridor development, management and performance reviews.
MODULE 11 REVIEW OF THE TRANSPORT CORRIDORS IN WEST & CENTRAL AND IN EAST AND SOUTHERN AFRICA

Module 11.1 Review of The Transport Corridors Situation in West, Central and East Africa

By Jean Kanymuhanda

Table of Contents

1 Introduction .................................................................................................................................. 3
2 Overview of the major transport corridors in West, Central and East Africa ..................... 3
  2.1 East African corridors: ........................................................................................................... 3
    2.1.1 Northern Corridor: Mombasa – Nairobi – Kampala / Juba – Kigali – Bujumbura / Eastern DRC ................................................................. 3
    2.1.2 Central Corridor: Dar-es-Salaam – Kigali – Bujumbura / East DRC ............... 4
  2.2 IGAD: Djibouti Corridor ..................................................................................................... 6
  2.3 Central African Corridors: ................................................................................................. 6
    2.3.1 CEMAC: Douala-Bangui/Ndjamena corridor ......................................................... 6
    2.3.2 ECCAS Corridors ....................................................................................................... 8
    2.3.3 CICOS corridor: ....................................................................................................... 9
  2.4 West African Corridors ...................................................................................................... 9
    2.4.1 Economic Community of West African States (ECOWAS) ......................... 9
    2.4.2 West African Economic and Monetary Union (WAEMU) Corridors .......... 10
3 Role of The Transport Corridors to Promote Economic Growth and Regional Integration .......................................................................................................................... 13
  3.1 Corridor management institutions (CMIs) role and value added ....................... 13
  3.2 CMIs and transport policy implementation ................................................................. 14
    3.2.1 Improving and extending the connectivity of regional corridors in order to boost continental and inter-country trade: ......................................................... 14
    3.2.2 Reducing transport logistic costs for all modes of transport in order to foster exports and reduce the costs of imports: ......................................................... 16
    3.2.3 Promoting regional economic growth through the transformation of transport corridors into development corridors ................................................................. 19
    3.2.4 Fostering safe and secure means of transport that protect both goods and the lives and livelihoods of people: ................................................................. 20
3.2.5 Promoting means of transport infrastructure and services that are sustainable and minimise adverse impacts on the environment and communities: ............ 20

3.2.6 Improving the overall sector governance, by developing and implementing efficient regulations allowing fair competition within and between transport modes, eliminating abnormal practices and overloading and conducing to efficient transport infrastructure maintenance systems: ......................... 21

4 Conclusions and Recommendations ......................................................................................................................... 22
1 Introduction

Transport corridors play an important role in the development of the corridor member countries and the region, as they facilitate the expansion of other socio-economic sectors. In the past, most corridors in Africa were used as just physical road infrastructures connecting individual landlocked countries to sea ports in other countries, crossing the territory of one or several countries before reaching the maritime gateway. The corridor was an addition of successive national trunk roads, regulated by the national policies, rules and regulations, without any coordination mechanism, harmonization nor facilitation measures between the participating countries. After the 60s, with the independence era of most African countries, inspired by the experience of other regions and continents, and taking benefit of existing instruments on international transit transport, some corridor countries signed different conventions, treaties or agreements aimed to facilitate transit transport. Corridor management and coordination mechanisms were initiated under different approaches, including the establishment autonomous corridor authorities or ad hoc joint committees of senior officials from the corridor countries. In the 80s, with the introduction of regional integration and cross border initiatives, regional economic communities (RECs) were established in different African regions, with a wide mandate covering the coordination of all socio-economic sectors, including the transport sector. Corridors issues were considered as one component of the transport sector, and managed under the RECs institutional frameworks, generally overseen by the department in charge of infrastructures or transport. This led to the development of different transport corridors in various African regions, different styles of corridor management, different performance, and sometimes pursuing different objectives.

2 Overview of the major transport corridors in West, Central and East Africa

This chapter provides an overview of the main transport corridors in East Africa (Northern, Central and Djibouti corridors), in Central Africa (Douala-Bangui/Ndjamena and ECCAS corridors), and West Africa (ECOWAS and WAEMU corridors, basically all corridors departing from the key operational coastal ports in West Africa: Cotonou, Lome, Tema, Abidjan and Dakar). The overview is summarizing the main information on the corridor: background, mission, institutional framework, and achievements.

2.1 East African corridors:

2.1.1 Northern Corridor: Mombasa – Nairobi – Kampala / Juba – Kigali – Bujumbura / Eastern DRC

i. Background: The Northern Corridor Transit Agreement (NCTA) was concluded in 1985, between Burundi, Kenya, Rwanda, and Uganda, joined by the Democratic Republic of the Congo (former Zaire) in 1987, and South Sudan in March 2013. In 2007, NCTA was revised into NCTTCA (Northern Corridor Transit & Transport Agreement). The mandate and scope was extended to emphasize the transport dimension of the 1985 agreement, and to promote the use of
the Northern Corridor as the most effective route for the surface transport of goods between Partner States.

Under the revision, NCTA was reinforced by the reference to international instruments and provisions including the multimodal transport, public-private partnerships and sustainable environmental development, etc. Additional protocols on maritime port facilities, transit routes and facilities, customs controls, road and rail transport of transit goods in transit, inland waterways transport, pipeline transport for oil products was equally introduced.

ii. **Mission**: the mission of NCTTCA is to transform the Northern Corridor into an economic development Corridor that provides competitive transit transport services and opportunities for private sector investments along the Corridor, and promotes national and regional trade and integration.

iii. **Institutional framework**: NC-TTCA is a regional organization led by the Council of Ministers, comprising an Executive Board, Specialized Committees, Public-Private Partnership Committee, and Permanent Secretariat. The Permanent Secretariat is responsible for the day-to-day operations, circulates information, and provides advice to the stakeholders in relation to corridor transport matters.

iv. **Achievements**: the enhanced cooperation on transit transport between the corridor member states permitted to reach major achievements which include the simplification of clearance procedures at Mombasa Port that permitted to release landed cargo within two days, the reduction in the number of national documents requested for transit transport along the Corridor, the use of one single customs declaration, the electronic exchange of customs and transit data, the reduction of transit time between Mombasa and Bujumbura from 30 to 15 days, harmonization of axle load limits, the rehabilitation of major Corridor road sections, and the establishment of a transport observatory to monitor the corridor performance. One of the most important achievements is the implementation of the EAC Customs Union, especially the concept of the customs single territory (see Box 1 below).

2.1.2 Central Corridor: Dar-es-Salaam – Kigali – Bujumbura / East DRC

i. **Background**: The Central Corridor Transit Transport Facilitation Agency Agreement (CCTTFA) was signed in September 2006, between Burundi, Democratic Republic of the Congo, Rwanda, Tanzania, and Uganda. It is aimed to promote the use of the central corridor as the most efficient and effective route for the transportation of goods by surface and lake transport from the Port of Dar-es-Salaam and the participating states. The Agreement focuses regional integration objectives and refers to international instruments and programs aimed to facilitate the connection of landlocked countries.

ii. **Mission**: CCTTFA mission is to facilitate the provision of efficient corridor infrastructure and services by ensuring a sustained availability of the Central Corridor, competitiveness of the costs involved in using the Corridor, coordinated and harmonized transit procedures, minimized and predictable transit delays and costs.
iii. **Institutional framework**: CCTTFA is a regional organization led by the Interstate Council of Ministers, the Executive Board, the Stakeholders Consultative Committee (STACON) and the Permanent Secretariat. The Council of Ministers is responsible for coordinating NCTTFA policy issues, comprising the Ministers in charge of transport in member states. The Executive Board is responsible for the formulation of general principles and policies governing TTFA, comprising the Permanent Secretaries of the Ministries responsible for transport and one representative of the private sector from each Member State. The Stakeholders Consultative Committee (STACON) provides feedback on corridor projects and activities. The Permanent Secretariat is responsible for the implementation of decisions and resolutions of the Council of Ministers and the Executive Board.

iv. **Achievements**: the major achievements of CCTTFA include a general good condition of the main corridor road network, consecutive to the mobilization of bilateral and multilateral donor funds that permitted to finance construction and rehabilitation works on the major road sections of the Central Corridor, the reduction of police and customs check points from 53 to 9 including 3 check points jointly operated by customs, police and transport (weighbridges), the development of an electronic cargo tracking system along the Tanzanian corridor section which permitted to reduce the number of check points and the removal of the escort system, the construction and operationalization of one stop border post at Rusumo between Rwanda and Tanzania, Mutukula between Tanzania and Uganda, as well as Kabanga/Kobero between Burundi and Tanzania, the establishment of a transport observatory to monitor the corridor performance. Finally, CCTTFA came up as an alternative route competing with NCTTCA, which permitted to improve the quality of services in both Mombasa and Dar-es-Salaam ports, and reduced the overall transit costs and delays.

**Box 1: Trade and Transport Facilitation in EAC: EAC Customs Union implementation**

One of the most important achievements in the recent past in the EAC countries is the implementation of the EAC Customs union. The Heads of States in Rwanda, Uganda and Kenya took the lead and instructed their respective customs administrations to launch the implementation of the customs single territory before end 2015. Since then, most imported goods of Uganda (except sensitive products) and all imported goods of Rwanda are cleared from the port of Mombasa as the entry point of the EAC customs territory, just like those of Kenya. As the customs information systems interconnection between Kenya, Uganda and Rwanda is operational since 2013, and the electronic payment effective, customs documentation is straight forwarded to the destination customs administration for verification and clearance, duties are paid from the destination country, and the goods released very quickly. This permitted to remove several non-tariff barriers, save time and costs at all stages of the transit chain. The customs bond on the transit goods cleared at the Port of Mombasa has been removed, as well as the long inspections processes at the border posts. The sensitive products and other transit goods not declared and cleared from the port (as per importers choice) are transported to the final destination under the COMESA Regional Customs Transit Guarantee (RCTG).

Inspired by the experience of the Northern Corridor, Tanzania, Uganda, Rwanda and Burundi have decided to similarly replicate on the Central Corridor from the port of Dar-Es-Salaam. Declaration and clearance of transit goods to Rwanda and Burundi are effected from the port as the gateway of one single customs territory, the border posts of Rusumo to Rwanda and Kobero to Burundi are operational as One Stop Border Posts.
2.2 IGAD: Djibouti Corridor

i. **Background:** The Intergovernmental Authority on Development (IGAD) was established by an agreement signed on March 31, 1996 between Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda, aimed to revitalize and expand the former Intergovernmental Authority on Drought and Development established in 1986. The Republic of South Sudan signed the agreement in 2011. The port of Djibouti is particularly important for Ethiopia, and will likely be an alternate corridor for South Sudan.

ii. **Mission:** With regard to transport and trade facilitation, the IGAD objectives aim to harmonize transport and trade policies, eliminate tariff and non-tariff barriers, and develop a coordinated transport infrastructure.

iii. **Institutional framework:** IGAD is led by the Assembly of Heads of State and Governments, it comprises the Council of Ministers, the Committee of Ambassadors, and the Executive Secretary. The Assembly of Heads of State and Governments issues policies and guidelines, and directs the functioning of the Authority. The Council of Ministers issues recommendations to the Assembly, approves the budget of the Authority, and supervises its functioning. The Committee of Ambassadors provides guidance to the Executive Secretary in the interpretation of policies and guidelines, and informs the Member States as needed. The Executive Secretary is in charge of all executive functions of the Authority (administrative, financial, etc.)

Djibouti corridor is under IGAD coordination; no specific authority has been established to manage corridor issues. However, consultations with the key stakeholders are going on to establish a corridor authority, with an active participation of Ethiopia and COMESA.

iv. **Achievements:** IGAD achievements in transport development were mainly limited to the identification of some infrastructure projects in road and port rehabilitation. The priority was given to peacekeeping efforts in the Horn of Africa, one of the most difficult and unstable regions on the continent since several years.

2.3 Central African Corridors:

2.3.1 CEMAC: Douala-Bangui/Ndjamena corridor

i. **Background:** CEMAC is the Central Africa Economic and Monetary Community, composed of Cameroon, Gabon, Congo, Equatorial Guinea, Chad and Central African Republic. The establishing treaty was signed in 1994, to replace the former Central Africa Customs and Economic Union (UDEAC) that was created in 1964.

Douala-Bangui/Ndjamena is connecting the Port of Douala in Cameroon to Bangui in Central African Republic (1410 km), and Ndjamena in Chad (1819 km). The corridor management and operations are regulated by bilateral conventions between Cameroon and CAR, and between Cameroon and Chad respectively established on December 22, 1999 and April 13, 1999, although some provisions need to be updated. Both agreements were revised in 2014, but were not harmonized with the new CEMAC transit regime adopted in October 2010, nor referred to
international principles with regard to corridor transport development and management, trade and transport facilitation and regional integration, etc.

ii. **Institutional framework**: The institutional organization comprises the Conference of Heads of State, the Commission, the Assembly, the Court of Justice. CEMAC Commission acts as an executive secretariat of the Community, structured into 4 directorates led by 4 commissioners: “Common Market”, “Infrastructures and Sustainable Development”, “Economic, Monetary and Financial Policies”, “Human Rights, Governance, Human and Social Development”.

At the regional level, transport issues are managed under CEMAC Commission through the Directorate of Infrastructure and Sustainable Development. A transport section within the Directorate is in charge of the coordination of the CEMAC Transport and Transit Facilitation Program implementation. The customs union department also intervenes for the CEMAC new transit regime implementation. A joint technical committee composed of representatives of transport and customs administrations in Cameroon, Chad, Central African Republic and CEMAC Commission have been established to oversee the overall program implementation.

iii. **Achievements**: The major achievement was the improvement of Douala-Bangui/Ndjamena corridor road network condition, all seasons operational while in the past, the traffic was regularly interrupted during the rainy season. Most investments were allocated to roads construction and rehabilitation in Cameroon and Central African Republic (CAR), and Chad, especially in Cameroon as the corridor Douala-Ndjamena via Kousseri is 99% located in Cameroon. This permitted to reduce the transit time from 9 to 5 days from Douala-Bangui Corridor before the crisis in CAR, and from 12 to 8 days for Douala-Ndjamena corridor.

The establishment of Douala single window coupled with the Cameroon customs reforms including the instauration of performance contracts have contributed to reduce Douala port dwell time compared to the past port performance.

The rail transport has been improved, although the dwell time at the rail terminal in Douala and Ngaoundere are still long. The performance of the railway linking Douala to Ngaoundere (884 km) has improved, the acquisition of new locomotives and wagons as well as the rehabilitation of some critical sections over the past 4 years permitted to increase the rail line capacity and reliability. It is used to connect the Northern Cameroon and Chad through the multimodal platform of Ngaoundere, and Central African Republic via the multimodal platform of Belabo. Plans are under consideration to improve/upgrade the infrastructure and equipment of Edea, Belabo and Ngaoundere terminals.

**Box 2: CEMAC regional context: instability and insecurity**

CEMAC Commission has suffered from the difficult regional context, still affecting the corridor performance. The insecurity and political instability since 2013 have negatively impacted on Douala-Bangui corridor activities, including the planned construction and maintenance works on different corridor sections in Central African Republic that have been delayed. Similarly, the insecurity in North Cameroon since 2014 has affected transport activities on the northern part of Douala-Ndjamena corridor, especially the Cameroonian section from Maroua to Kousseri at the border with Chad. The road section is very close to the border with Nigeria on about 300 km, and was already in poor condition before the
insecurity period. The transit traffic from Douala and Ngaoundere to Chad has shifted through Touboro (Cameroon)/Koutere (Chad) border post and Moundou in southern Chad, before reaching Ndjamen.

### 2.3.2 ECCAS Corridors

**i. Background:** The Economic Community of Central African States (ECCAS) was established in October 1983, composed of Cameroon, Chad, Central African Republic, Gabon, Equatorial Guinea, Congo, Democratic Republic of Congo, Rwanda, Burundi, Angola and Sao Tome.

With regard to transport, ECCAS member states committed to develop a wide program that includes promotion of regional infrastructure integration, rules and regulations harmonization, improve transport coordination, railway networks interconnection etc. In 2004, a Transport Master Plan in Central Africa was approved to facilitate the access to landlocked States, and connect international and regional market places. A Monitoring and Implementing Committee was established to promote the master plan, set resource mobilization mechanisms. Most activities/projects identified are part of the NEPAD program in Central Africa, some of them are underway, funded by member states, regional financial institutions and multilateral donors.

**ii. Mission:** ECCAS aims “to promote and strengthen harmonious cooperation and balanced and self-sustained development in all fields of economic and social activity”. Transport and communications, trade and customs are among the multiple priority areas highlighted by the ECCAS treaty. Under the treaty, member states committed to promote the integration of transport and communications infrastructures, increase the efficiency of the different transport modes, and harmonize transport and communications regulations.

**iii. Institutional framework:** the institutional organization comprises the Conference of Heads of State, the Council of Ministers, the Court of Justice, the General Secretariat, the Consultative commission, and Specialized technical committees. As for the other RECs in Central and West Africa, ECCAS has no dedicated corridor management unit. A transport unit is in charge of all transport related issues for all transport modes, in coordination with the national transport departments of member states. Some ECCAS member countries are overlapping ECOWAS and CEMAC. Any joint corridor project will require the harmonization of procedures, regulations, standards, etc.

**iv. Achievements:** ECCAS has set different arrangements with ECOWAS and/or countries to implement specific projects. A cooperation protocol was signed in December 2008 between ECCAS and ECOWAS on the Transport and Transit Facilitation Program along the Trans-National Corridor of Bamenda-Enugu (Cameroon and Nigeria) that includes Mfum bridge and Joint border post. ECCAS facilitated the conclusion of MoU between Congo and Gabon on the Brazzaville-Libreville road and between Congo and Cameroon on the Brazzaville-Yaoundé road. Joint technical committees have been established to supervise the project implementation in both countries.
2.3.3 CICOS corridor:

i. **Background:** CICOS is the International Commission for the Congo, Oubangui and Sangha Basin. It was established in 2003, composed of Congo, DRC, CAR and Cameroon, aimed to ensure the navigability of the above basin inland waterways.

ii. **Mission:** CICOS was assigned the mission of ensuring the promotion and development of the multimodal corridor Pointe-Noire-Brazzaville-Bangui, through the railway from Pointe-Noire to Brazzaville in Congo and the inland waterways from Brazzaville to the Democratic Republic of Congo and the Central African Republic.

iii. **Achievements:** The corridor is not yet really developed, due to the lack of resources to finance corridor infrastructure and maintenance. Waterways are navigable only a few months per year, they are generally used for the transport of a limited quantity of timber from CAR and DRC to the port of Brazzaville.

2.4 West African Corridors

2.4.1 Economic Community of West African States (ECOWAS)

i. **Background:** The treaty establishing ECOWAS was signed in 1975, between Nigeria, Ghana, Benin, Togo, Ivory Coast, Burkina Faso, Mali, Niger, Guinea, Liberia, Sierra Leone, Senegal, Guinea Bissau, Gambia, and Cabo Verde. The most important instruments regulating the corridor transport are the Interstate Transport Convention (TIE) signed in Cotonou (1982) and the Interstate Road Transit Transportation signed in Lome, (May 1982). However, the implementation failed, as the most important provisions expected to facilitate the movement of goods and people were not implemented: interconnection of customs information systems, single customs guarantee mechanisms, proliferation of legal and illegal check points, etc. The situation varies from a corridor to another, sometimes from a country to another, etc.

ii. **Mission:** Under the treaty, ECOWAS mission is aimed to promote cooperation and development for the purpose of raising the standard of living and fostering closer relations among the members of ECOWAS. The main objective of the Community is regional integration through the establishment of a Customs Union.

iii. **Institutional framework:** ECOWAS institutions are comprising the Authority of Heads of State and Government which issues the general guidance. The Council of Ministers (in charge of ECOWAS Affairs) is responsible for the functioning of the Community, makes recommendations, issues directives on coordination and harmonization matters. The Commission coordinates the ECOWAS institutions activities, particularly responsible for strategic planning, policy analysis and regional integration. The organization structure also comprises the ECOWAS Community Parliament, Economic and Social Council, Court of Justice and Arbitration Tribunal.

The Department of Transport (and Telecommunications) is under the Office of the Commissioner of Infrastructure. Its responsibilities include the preparation of transport policies laws and regulations, the development of an ECOWAS extensive highway network, the promotion of joint
ventures and the private sector participation in the transport sector development. The department also covers the development of maritime and inland waterways transport, as well as regional air transport services.

iv. **Achievements:** The principal corridor program has been the continued implementation of the ECOWAS Regional Road Transport and Transit Facilitation Program. Achievements include the implementation of ECOWAS Joint Border Posts Program (still in progress), the axle load harmonization policy, and the construction and/or rehabilitation of different road sections and facilities on different transit corridors, funded by different development partners including the European Union, the World Bank, African Development Bank, AFD (French Development Agency), JICA (Japan International cooperation Agency) etc. The lessons learnt from the program implementation suggest to reinforce the coordination and harmonization between different interveners: government institutions, member states, RECs, development partners, private sector, etc. This would help to better coordinate and harmonize work programs of all corridor actors and activities, preventing the risk of executing projects that will not achieve the assigned objectives and expected results, like infrastructures and facilities that cannot be operationalized after their completion.

The Supplementary Act on the Harmonization of Standards and Procedures for the Control of Dimensions, Weight and Axle Load of Goods Vehicle within ECOWAS Member States was adopted in 2012, and signed by all member governments in 2013. With the support of development partners under different transport projects, mobile and fixed weighbridges and other related facilities logistics equipment have been acquired. The implementation has started, but the progress varies from a country to another, the expected results in terms of overloading reduction are not yet there. The transporters resistance to the axle load control in the region is still high, governance issues are still observed on some corridors from government officials in charge of the axle load control and weighbridge operations.

Since 1994, national and regional committees comprising representatives of the departments in charge of transport and road transport industry in each ECOWAS member state have been established to monitor the implementation and enforcement of the different conventions, protocols, and other instruments, especially the monitoring of road blocks and check points on the regional interstate roads and corridors. However, the committees were not able to meet the expected results, due to the lack of funding.

### 2.4.2 West African Economic and Monetary Union (WAEMU) Corridors

i. **Background:** the treaty establishing WAEMU was signed in January 1994, by Ivory Coast, Burkina Faso, Benin, Togo, Niger, Mali, and Senegal. Guinea Bissau joined the union in 1997. All WAEMU member states are also ECOWAS members. The treaty was revised in 2003.

ii. **Institutional framework:** the key institutions of WAEMU are the Conference of Heads of States, the Council of Ministers, the Executive Commission, the court of Justice and the Parliament. There are 11 transport corridors in WAEMU. Each corridor is managed by a corridor committee supervised by the WAEMU Orientation council, under the general supervision of WAEMU
iii. **Mission**: WAEMU objective was to promote regional integration and establish a common market. With regard to transport, WAEMU transport policy provides for transport corridors development, emphasizing the importance of ensuring maritime access the landlocked states. The role of the private sector in corridor development and management is equally highlighted, public private partnerships are encouraged.

iv. **Achievements**: Like most other transport corridors, some progress were achieved on the improvement of corridor infrastructure and facilities, especially roads construction and rehabilitation works with the support of different development partners. Similarly, some ports like Abidjan and Lome have made significant improvement in the reduction of port dwell time. Sector policy reforms were adopted in several countries, but were not properly implemented. Important provisions expected to facilitate the movement of goods and people were not implemented: electronic exchange of customs and transit data, single customs guarantee mechanisms, non-tariff barriers, liberalization of the transport market, etc. However, the performance varies from a corridor to another.

a. **Abidjan-Lagos Corridor**:

Abidjan-Lagos Corridor is a coastal corridor linking 5 West African countries: Ivory Coast, Ghana, Togo, Benin and Nigeria. The trucks traffic is not as high as it is on the other regional corridors, it is basically facilitating the intra-regional trade and passengers transport, compared to corridors connecting the landlocked countries to the gateways. The corridor monitoring is ensured by the Abidjan Lagos Organization (ALCO), which periodically collects, analyses and publishes data on the port performance (port dwell time in Abidjan, Tema, Lome, Cotonou and Lagos), the transit time on the national road sections on the corridor, the border crossing time, the number of road blocks and check points on each corridor section. As an indicative example, ALCO has reported for semester 2, 2015 a port dwell time of 13 days in Abidjan, against 25 days in Lagos (Apapa), a border crossing time of 42 hours from Seme in Nigeria to Krake in Benin, against 5 hours from Hillacondji in Benin to Sanvi Condji in Togo, and a number of 15 road blocks on 105 km from Seme to Lagos in Nigeria against 16 on 558 km in Ghana, and only 2 located at the border posts in Togo (53 km).

b. **Tema-Ouagadougou-Bamako Corridor**

The corridor is connecting Mali and Burkina Faso to Tema Port in Ghana. Its strategic importance raised during the instability period in Ivory Coast, from 2000 to 2012. Before the Ivorian civil war, Burkina Faso and Mali import and export goods were transiting through Abidjan-Ouagadougou and Abidjan-Bamako Corridors. The past trends are progressively being confirmed, the import-export transactions through the Port of Abidjan from both countries are increasing, while they are reducing at the Port of Tema. Similarly, the transit traffic is gradually decreasing on Tema-Ouagadougou corridor, while it is growing on Abidjan-Ouagadougou Corridor. Several
factors may explain these changes: the social and political affinity and closeness between Burkina Faso and Ivory coast, membership to WAEMU while Ghana is not, which raises a critical constraint of currency access (Ghana Cedi is not convertible, Burkina and Mali use XAF/FCFA like Ivory Coast), the language constraint (Mali and Burkina transporters speak French while Ghana uses English) which poses an important issue of communication. Furthermore, Ghana customs procedures and documents are different form Mali and Burkina Faso, while Ivory Coast is harmonizing as a WAEMU member.

It is worth to note that over the last 10 years, the USAID funded West Africa Trade Hub (WATH) supported WAEMU to monitor corridor performance on 7 transport corridors, including Tema-Ouagadougou-Bamako Corridor, through IRTG (Improved Road Transport Governance Initiative) up to 2013, and Borderless Alliance since 2013.

c. **Abidjan-Ouagadougou Corridor:**

In addition to the above information in comparison to Tema-Ouagadougou-Bamako Corridor, it is worth to note that rail transport on Abidjan-Ouagadougou corridor is improving, due to the revitalization of the Ivorian economy, and the concessionaire efforts to improve the SITA performance. As mentioned earlier, the performance of Abidjan port has also improved, the port dwell time have improved.

Ivory Coast and Burkina Faso have signed a bilateral agreement on road transport that includes several important policy reforms aimed to facilitate transit and transport on the Abidjan-Ouagadougou corridor. A roadmap of policy actions to be undertaken has been agreed. Despite some weaknesses and uncertainties, improvement in the corridor efficiency can be expected in the mid or/and short term. The initiative is a bilateral pilot operation which can inspire Mali and Niger to join the process.

d. **Dakar- Bamako Corridor:**

It is the shortest corridor (1341 km) and the most used by transit traffic to Bamako. However, it is facing the longest transit delays, mainly due to the escort system that creates avoidable congestion at check points and border post. In terms of governance, the corridor is reported to have the lowest performance in the region, in terms of check points, bribes and control time, on both Senegalese and Malian corridor sections. Both countries are jointly preparing the rehabilitation of the railway between Dakar and Bamako.

e. **Lome-Ougadougou Corridor:**

It is the shortest corridor to Ouagadougou (928 km), compared to other regional corridors to Burkina Faso. A joint border post has been established at Cinkanse in July 2014. However, the expected facilitation to the border crossing operations in terms of time saving has not yet happened, the trucks queues and the crossing time are still long. An electronic cargo tracking system operated by COTECNA has been deployed on both corridor sections, under 2 separate PPP contracts. To reduce the transaction costs, it would be preferred to negotiate the establishment of one single system covering the entire corridor, with one device from the port to the destination,
rather than removing it at the border and installing another as it is currently done. In terms of corridor governance, the Port of Lome is recording the best performance in the region, the police and gendarmerie check points have been removed due to a strong political commitment, reinforcing the regional competitiveness of the port and the corridor. However, the new security threats in the region may push the country to restore security checks along the corridor.

f. Cotonou-Niamey Corridor:
The corridor is the shortest connection (1070 km) and the most used by the transit traffic to Niamey. Two third of Niger import export activities use this corridor which is reported to have a high number of road blocks, bribes and delays, as well as some road sections still in poor condition.

3 Role of The Transport Corridors to Promote Economic Growth and Regional Integration

3.1 Corridor management institutions (CMIs) role and value added
The Corridor management institutions (CMIs) can play a strategic role in corridor development and efficiency improvement. They can ensure an advisory role to corridor member countries and RECs, helping them to develop a new approach of corridor management focusing performance and competitiveness, oriented to the achievement of the stated policy objectives. Consequently, a well performing and competitive transport corridor will contribute to create an enabling environment for economic growth and facilitate the regional integration.

CMIs can play a critical role in the following areas:

i. Corridor coordination: the high number of corridor interveners from different areas and professions with different objectives and sometimes conflicting interests requires a good level of coordination, that cannot be efficiently ensured by government agencies, RECs or the private operators. The coordination role of CMIs is aimed to create a productive environment that facilitates the parties involved in corridor activities to coherently implement them in a way that improves the overall corridor performance. This includes the facilitation of the flow of information between the stakeholders, aimed to develop consensus on the initiatives to be taken.

ii. Advocacy: corridors are not static concept, should be dynamic and sometimes operate reforms to better respond to the member countries or regional changes in vision and priorities. Reforms often face resistance and may require advocacy at several levels including the decision makers and the member governments. This may be the case for the revision of a corridor agreement or convention, the introduction of new regulations, transport policy reforms etc. The change may also be the introduction of initiatives that have been successful in improving performance and efficiency on other corridors. CMI can play the advocacy role and take the lead in proposing such reforms where they are required.

iii. Corridor promotion: CMIs are in a good position for building and selling the corridor image to the business community and other potential corridor users. This may be done through the
production and dissemination of quality information on the corridor programs and activities, regulations and operational procedures, indicators and performance, infrastructures and services, comparative advantages with regard to other corridors etc. A good promotion may stimulate the corridor activities including the increase of import-export volumes and the related transport operations. This may contribute to reduce transaction costs, transport costs and prices, and mobilize further investments in corridor infrastructure and services.

iv. **Corridor monitoring**: no specialized institution or structure has been assigned the responsibility of monitoring corridors performance, while the monitoring exercise is critical to ensure an efficient mid and long term corridor planning. All initiatives taken by RECs or corridor member countries to fill the gap have generally been undertaken on an ad hoc basis and cannot be sustained. CMIs constitutes an appropriate framework for monitoring the corridor performance, on the basis of data generated by a transport observatory that may be created within the CMI structure or under its supervision.

v. **Trade and Transport Facilitation**: the provision of transport infrastructure, services and regulations is not enough to ensure corridor efficiency, as it is observed in different regions, in the absence of appropriate measures of trade and transport facilitation, which require an open and inclusive dialogue between the corridor stakeholders at national and regional levels. However, such measures are not always given the right consideration although they are key to achieve the socio-economic impact of any transport project, and country initiatives need to be harmonized and complemented to ensure a coherent corridor perception. CMI can serve as a good platform for facilitating the dialogue on corridor performance, challenges and opportunities, aimed to achieve an efficient movement of goods throughout the corridor.

In the absence of a dedicated Corridor management institution, the above aspects are missed or only a few of them implemented in an uncoordinated way, under the initiative of RECs or individual member states.

### 3.2 CMIs and transport policy implementation

The following sections aims to propose practical actions that may be undertaken by CMIs, alone or jointly with other corridor stakeholders, in implementing the transport policy strategic objectives and recommendations.

#### 3.2.1 Improving and extending the connectivity of regional corridors in order to boost continental and inter-country trade:

CMIs can advise RECs and corridor member states in the following areas:

i. **RECS and member states** have the primary responsibility of the implementation of the integrated African road network, including the Trans African Highway (TAH), and most corridors or corridor sections across the continent are expected to be part of the integrated network. As CMIs are technically in the best position to address corridor issues, they can advise REC’s and corridor states on the development of the corridor sections identified to form TAH. Their advice will help to ensure that the technical standards of the corridor infrastructure and facilities are harmonized,
road and rail networks are integrated, road and rail safety aspects are taken into consideration, implementation schedules are harmonized, etc.

ii. CMIs can contribute to promote the use of ICT and transport intelligent systems on the African corridors. The performance and efficiency of the African corridors have not significantly changed over the last decades compared to the progress made elsewhere in developed and emerging countries. The economic development of the continent does require the modernization of the transport infrastructure, equipment and services. The use of intelligent transport systems (ITS) on African corridors, transport networks in general would improve their efficiency and competitiveness.

iii. CMIs can play an important role in the promotion of SMART corridors, by advising and assisting corridor member states and RECs on how better they may be implemented, the best practices and results achieved around the world in terms of performance and efficiency, ensuring the information of corridor stakeholders through the provision of related documentation, thematic seminars and workshops, facilitating study tours for corridor decision makers, technical experts and key transport operators where such tours can be productive. SMART corridors should be developed, as a strategy to achieve an efficient traffic movements monitoring and a trade and transport facilitation tool that generates and disseminate real-time information to the corridor stakeholders. The development of SMART corridors will permit to benefit from the advantages of new facilitation instruments promoted by WCO and WTO to facilitate the administrative procedures of international trade and transport, aimed to eliminate paper documents through electronic documents and data exchange.

Box 3: Electronic cargo tracking systems on African transport corridors

The movement of transit cargo on most corridors are monitored by electronic cargo tracking systems, at least on the corridor sections of the coastal countries. Some transit and destination countries have equally acquired tracking systems, or are in the acquisition processes. However, no corridor in east, central and western Africa regions is covered by one single system, tentative negotiations to harmonize or develop a regional tracking system have failed or stuck. The most rational solution would be the extension of the existing system on the whole corridor, if it is technically and economically efficient.

Most systems have been acquired several years ago on the initiative of the customs administrations in association with some other private or public partners through non-competitive processes, making difficult the technical performance and costs evaluation, information required by the other corridor countries before negotiating the extension or making decision. Considering the rapid development of the new information technologies, new efficient and cheaper IT systems may be deployed to replace the old and expensive tracking systems, if the corridor countries commit to better cooperate, especially the port countries which argue the investment made, and provide most data to feed the system.

The tracking systems generally permitted to remove the escort systems of transit cargos, and prevent most fraudulent practices of offloading transit goods in transit countries including the port country. However, efforts should be made to avoid the triple overlapping of tracking systems, customs bond guarantee on transit goods and escort as it is on some corridors. Escort fees without physical escort have even been reported in some corridor countries. These unnecessary practices increase the transport costs and delays and impact on the corridor performance.

In the east African region, Uganda and Rwanda are finalizing the establishment of a cargo tracking system on their respective corridor sections, supplied by the same operator B-SMART. It is not yet clear if Kenya will adopt the same
iv. CMIs can advise RECs, member governments and port authorities on the strategies for improving ports capacity and performance: port reforms, upgrading, extension, and develop hub ports where feasible. CMI may facilitate the port dialogue with the major stakeholders including international shipping lines and port operators/concessionaires. African ports management and development need reforms to meet the requirements of the new economic environment with regard to globalization and international trade. Increased port capacity through new facilities, extension or upgrading of the existing port infrastructures and equipment is needed to handle all ships categories and size including the most capacitive. The development of regional hub ports in Africa may address the predicted challenges of the international maritime transport, and the anticipated mid and long term port competition in different regions. Improving efficiency of the existing port facilities is equally needed, to reduce the long port dwell time observed in many African ports, as it is already being done in some ports like Lome and Abidjan, Mombasa and Dar-es-Salaam.

v. Similar efforts should be done to improve the performance of private services providers, that may include the revision of undergoing port concessions and services contracts, aimed to reflect performance objectives including the reduction of port dwell time, and the quality of services delivered. CMI can advise member states, RECs and port authorities on the strategic importance of ports as corridor gateways, and the necessity to link port activities to those of the other corridor components for more coherence and complementarity. They will advise on a strategy to coherently improve the overall corridor performance, all corridor components (gateway, link, nodes) being considered as a whole. Some analytical works and assessments on the existing situation can be conducted, with recommendations on more efficient policies, strategies and programs. This may require intensive and inclusive port dialogue that CMIs can facilitate.

3.2.2 Reducing transport logistic costs for all modes of transport in order to foster exports and reduce the costs of imports:

Most transport corridors in Africa are facing very high transport costs due to a combination of different factors which include poor infrastructure, transport chain unreliability, high vehicle operating costs, high port dwell time, delays at corridor check points and border posts etc. CMI can advise RECs and corridor member states on strategies and actions aimed to improve efficiency and reduce logistics costs on transport corridors, encouraging them to adopt the appropriate policy reforms where required, and ensure the recommended reforms are implemented. Undertaking assessments and analytical studies, submitting technical notes and memoranda to policy and decision makers, sensitization campaigns of different corridor stakeholders and users can contribute to reduce transport costs and prices on the corridor, and consequently reduce the costs of imports, and foster exports. The following areas may be considered:

i. Advising the institutions in charge of transport infrastructure in corridor member states and RECs on the strategies for the sustainable development, maintenance and management of corridor roads...
MODULE 11 REVIEW OF THE TRANSPORT CORRIDORS

and railway networks, ensuring they are permanently kept in good condition and contribute to reduce Vehicle Operating Costs. One of the strategies to be promoted is the implementation of multiyear performance based road maintenance contracts.

ii. Advising and encouraging the member states, the trucking industry and other corridor stakeholders on strategies to renew the inefficient fleet of old trucks still operating on different African corridors. CMIs can advocate for important sector reforms including the liberalization of the road transport market, aimed to create an incentive environment for transport businesses, before considering the acquisition of new vehicles which are technically and economically efficient in a viable business environment.

iii. Facilitating the regional dialogue aimed to address the corridor bottlenecks and other inefficiencies which increase transport delays and costs at different stages of the transport chain, from the port to the destination through the border posts and the intermodal logistics platforms. CMI can advocate for introducing solutions which have been successfully implemented on other corridors across the world, like the establishment of electronic single windows to facilitate electronic data exchange in port and border operations, electronic cargo tracking systems to monitor or manage the corridor traffic, effective one stop border posts which really simplify, harmonise and speed up border clearing procedures on both sides etc.

Box 4: The automation program of e-GUCE in Cameroon: Douala Single Window

The Single Window for External Trade Procedures of Cameroon (GUCE) is located in Douala Port. Created in 1999 as a joint association of different government and private stakeholders aimed to physically bring in the same place the key stakeholders involved in the domestic clearance process of imported goods. It was then progressively reinforced with IT equipment and systems, started to collect, process and disseminate useful information on port and customs operations in relation with imported goods. Around 2007, it started to process the automation of some procedures of external trade, focused on import of containerized goods. After 2010, GUCE conducted a sequential assessment of the import/export operations in Cameroon, identified all the procedures involved, at least 40 procedures were identified. The assessment permitted to design the dematerialization/automation program of external trade procedures in 2013, regularly updated as new procedures are identified. GUCE has initially hired external expertise to technically develop/automate the procedures identified. This permitted to build the internal capacity, so that the technical team has developed the ability to implement the dematerialization program with a minimum external assistance. Today, 26 procedures have been automated and are effectively exploited. This has contributed to reduce the port dwell time, especially the automation of the cargo manifest sharing and the electronic payment. Unfortunately, the time saved through the automation is lost through inefficiencies of other actors involved in the import-export operations. Among the multiple problems Douala Single Window establishment faced, one of the most important was the resistance from the different stakeholders, including the public administrations involved in the dematerialization process. A strong political commitment and support at high level was required. This was achieved through the establishment of the “Steering Committee” of the dematerialization program, chaired by the Permanent Secretary of the Prime Minister’s Office, with a Technical Secretariat led by the Director General of the Customs.

However, despite the owned, good and systematic approach followed, and the well committed technical and managerial team, Douala Single Window has taken too long: the final objective of getting a fully operational electronic single window is not yet achieved. While similar systems in other countries are implemented in one or 2 years (under a project approach
iv. Help building team work spirit and setting the same objectives between border field agencies (customs, immigration, security, phytosanitary etc.). CMIs can facilitate border operations harmonization between country teams operating on both sides, including the working hours to avoid unnecessary delays and long queues to the transporters at the border.

v. Multimodal transport development contributes to reduce transport costs, as far as it is well regulated and developed in an environment which encourages transport modes fair competition and complementarity, especially road and rail transport which are the most used in Africa. CMIs can facilitate the development of an efficient multimodal transport on the corridors, by providing technical advice on the integration of the multimodal dimension of corridor transport in the planning processes, rather than planning on a modal basis as it is currently observed, and providing institutional support to corridor member countries and RECs. CMIs can collect and disseminate information on multimodal transport, and facilitate the regional dialogue aimed to promote multimodal transport (meetings, seminars, workshops), training on multimodal transport projects cycle (preparation, implementation, evaluation, funding, regulation, etc.)

Box 5: Promoting multimodal transport

Although many transport corridors are multimodal, with both road and rail transport modes, the corridor management institutions generally focus on the road transport mode. Very limited efforts are made to monitor the performance of the rail transport mode, as well as the inland waterways where they exist. Even at country level, there is a need for better coordination and synergy between the line institutions in charge of rail and road transport modes, taking into consideration the multimodal dimension of the transport systems, and the potential benefits they may generate, including the reduction of transport costs and prices and the complementarity of the different modes of transport.

This lack of interest was in the past due to the poor performance of the rail sector over the last decades due to poor management, poor infrastructures and equipment that constrained economic operators to use of road transport mode rather than the inefficient rail mode. After 2000, different initiatives were taken in most African regions to reform the rail sector through rail concession contracts with private operators, that were expected to revitalize the sector and stimulate investments. Although some timid improvements were observed in a few countries like Cameroon with CAMRAIL and Côte d’Ivoire with SITARAIL, such reforms are generally complex and long processes, and will take time to meet the expectations.

CMIs can help the corridor countries and RECs to reinforce the multimodal dimension of the corridors, through technical advices in the preparation, the negotiation and the implementation of the rail concession contracts, including the regulations aspects. This would help to avoid unfair competition and monopolistic situation of one transport mode against the other modes, and optimize the exploitation of the existing transport systems. CMIs may also help to collect and disseminate performance indicators and other useful information on the rail transport mode and rail concession. Although the concession contracts are signed between governments and private operators, the concessionaries should be flexible, and cooperate with external entities that are not part of the contract, especially for the provision of business information.

vi. CMIs can help corridor governments and RECs to improve their planning systems and processes, ensuring harmonization and coherence in their respective development programs and projects. CMIs contribution can help to harmonize national and regional planning, ensuring the compatibility and complementarity of corridor transport infrastructure and facilities since the
planning phase, including appropriate linkages of cross border infrastructures. CMI’s advice can also ensure that the corridor performance dimension is considered when planning corridor investments (port, road, rail, border crossing, intermodal and multimodal interfaces etc.).

3.2.3 Promoting regional economic growth through the transformation of transport corridors into development corridors

In the context of regional integration, turning transport corridors from mere transit routes into economic development corridors by synergizing investments can stimulate regional trade, attract new investments, reduce poverty, generate economies of scale and encourage sustainable development along the transport corridors and close vicinity where opportunities exist. The possible contribution of CMI’s in transforming the transport corridors into economic development corridors may include:

i. Advising RECs and corridor member states on how to address transport logistics and facilitation constraints on the corridor by removing the numerous bottlenecks to trade and investments, in a broader vision of economic development.

ii. Encouraging RECs, corridor member states and corridor partners to adopt a joint approach of mobilization and packaging of investments for the development of corridor infrastructures and services.

iii. Advocating for the harmonization of transport policies and planning systems, regulations and standards, the promotion of fair competition through the market liberalization of the provision of transport infrastructure and services, the creation of an enabling environment promoting the participation of the private sector to the development and/or management of corridor infrastructure, logistics and transport services where they have a comparative advantage vis-à-vis the public sector.

iv. Encouraging RECs and member countries to establish and implement customs unions to facilitate trade and boost economic development. Several conventions and/or treaties on customs unions have been signed, some of them are partially or not implemented.

v. Advise RECs and member states on the potential sources of funding and mobilisation mechanisms for the development, maintenance and management of transport corridors infrastructure and services, ensuring that the decisions are fitting the macroeconomic framework and optimizing the economic impact of the programmes and projects to be executed.

vi. Advocate for setting sustainable and efficient funding mechanisms and policies for the transport corridors, including autonomous road maintenance funds of 2nd generation fed by road users and exclusively dedicated to maintenance activities. Investment projects (new construction, rehabilitation) should be funded by government investment budget and/or development partners, combination of grants and loans from international financial institutions through blended funding, Public-Private-Partnership where feasible.

vii. Assistance to the establishment of legal and regulatory instruments related to transport corridors, as well as providing technical inputs where required, especially the feasibility studies of corridor
development projects, as well as policy or any other strategic document related to transport corridor matters.

3.2.4 Fostering safe and secure means of transport that protect both goods and the lives and livelihoods of people:

Ensuring safety and protection for all users of corridor transport infrastructure and facilities, as well as of transported goods and material is the prime responsibility of the corridor member countries, in coordination with RECs and CMI. This will be achieved through the provision of safe transport infrastructure and services, which requires an efficient and harmonized transport sector planning and management systems in member states and RECs. CMI can advise RECs and Corridor member countries on strategies and actions aimed to:

i. Establish appropriate modal transport institutional frameworks for road and rail transport safety in all corridor member countries and RECs, especially the road transport mode as the high rate of road fatalities in sub-Saharan Africa constitutes a real obstacle to competitiveness and development.

ii. Reinforce the technical capacity of the institutions in charge of transport safety at country level, especially the Road safety agencies where they exist, and advocate for their establishment where they are not yet in place.

iii. Introduce road and rail safety audit concept, policies and strategies, build the required capacity for conducting efficient safety audits, having them executed and ensure that audit recommendations are implemented.

iv. Reinforce the structures in charge of road safety, enabling them to efficiently conduct technical inspection of transport equipment (vehicles), develop and implement safety regulations, regulate axle load and speed limit, ensuring the regulations enforcement.

v. Implement the African Road Safety Charter

3.2.5 Promoting means of transport infrastructure and services that are sustainable and minimise adverse impacts on the environment and communities:

CMI will promote the sustainable transport dimension in corridor development and management, by advising RECs and corridor member states on policies, strategies, programs and actions aimed to contribute to the world global efforts to improve sustainable transport. This may include:

i. Reduction of the use of fossil fuel by promoting the use of alternative fuels like electricity, bio-fuels and hydrogen where possible.

ii. Advising RECs and member states on strategies aimed to increase the fuel efficiency of transport services, through the development of electric railway systems, and the promotion of fuel efficient trucks in replacement of the old, fuel overconsuming and polluting vehicles still proliferating on the African corridors.
iii. Advice on the most appropriate international technical standards of fuel efficient vehicles, strategies to regulate the import of new and used vehicles,

iv. Advice on policies and strategies to remove the old and other fuel inefficient vehicles already present on the national and regional road networks,

v. Capacity building to the national and regional institutions in charge of transport and environment protection through training programs aimed to reinforce both institutions and technical staff capacity in the above areas.

vi. Strategies to promote multimodal corridor transport through rail and/or inland water transport as well as oil pipelines where economically and technically feasible, as alternatives to the road transport, using as much as possible clean energy.

vii. Reinforcement of the environmental dimension in the transport infrastructure development and transport services provision. This may be reached through workshops and seminars aimed to train or sensitize public and private stakeholders on the cost of pollution, as well as pollution charging strategies based on the ‘polluter pays’ principle, regulations and enforcement etc.

3.2.6 Improving the overall sector governance, by developing and implementing efficient regulations allowing fair competition within and between transport modes, eliminating abnormal practices and overloading and conducing to efficient transport infrastructure maintenance systems:

In addition to the actions proposed in the previous sections, CMI can advise RECs and Member states on strategies and actions aimed to:

i. Reform the transport market towards more competition, liberalizing the transport services particularly the trucking industry, setting access conditions to the transporter profession, eliminating the existing monopolies and oligopolies, elimination of the freight distribution quota systems, etc. The benefits of market liberalization include the expansion of the pool of transport operators and service providers, improved service quality and cost, and greater potential for economies of scale. CMI can advise RECs and corridor member states on the market liberalization advantages, and the strategies to achieve them. They can initiate analytical works and survey to assess the losses generated by the uncompetitive market as it currently is and simulate the gains to be generated with the establishment of a liberalized transport market.

ii. Eradicate non-tariff barriers along the corridor which include the proliferation of legal and illegal check-points by police and other security forces, customs, phytosanitary services, freight bureaux, transport agencies, etc. The check points operations are generally associated with harassment of transporters and bribes, unjustified long delays etc.

iii. Implement regional trade and transport facilitation best practices and measures, aimed to ensure a smooth movement of goods on the corridor, and reduce transport costs and delays.

iv. Develop efficient planning and monitoring systems through the establishment of transport databases in the member states, and a transport observatory at regional level, to periodically assess
the corridor performance on set indicators (infrastructure condition, quality of transport and logistics services, transit time, transport costs and prices)

v. Promote the role of the private sector in the funding, development and management of transport infrastructures and services, through the establishment of PPP. CMIs can advise Member governments and RECs to build the required capacity in the technical departments in charge of transport, through training programs in design, negotiation, implementation, monitoring and evaluation of PPPs. The lack of such skills in African countries is leading to unbalanced, opaque and expensive contracts, difficult to implement and often ending on disputes that governments generally lose.

vi. Advise RECs and member states on the strategies for developing an efficient, transparent and harmonized axle load control system on their road and rail networks including the sections of transport corridors. The systems may consist of standardized, networked and automatized weighbridges and weighing platforms, with clear regulations including offloading provisions of overloaded vehicles.

vii. Advocate for the establishment of an interconnected axle load control system of national systems, preferably with the same specifications and standards, and advise on the system maintenance and monitoring.

viii. Develop an axle load control database which ensures a periodic production and dissemination of information on all aspects of the overloading situation on the different corridor sections. CMIs may take the lead on the sensitization of the corridor users aimed to prevent trucks overloading, especially the transporters and policy makers.

4 Conclusions and Recommendations

Like in the other parts of the world, transport corridors in African countries and regions play a key role in the economic development of the continent. However, the corridors performance is characterized by high transport costs and delays, compared to other regional and international corridors worldwide. The low performance is due to a conjunction of several factors, which include the absence of an appropriate corridor management framework, and poor transport sector governance issues at countries and regional level. The situation has been aggravated by political security instability in several countries and regions across Africa. Transport corridors in Central and West Africa are managed under RECs units in charge of transport matters, while 2 established corridor authorities in East Africa are recording good performance in coordinating the corridor activities. The establishment of autonomous corridor management institutions (CMIs) to manage the corridor activities would certainly improve the corridor performance and contribute to reduce the transport costs and delays. CMIs can play a corridor coordination and promotion role, as well as an advisory role to RECs and corridor member states with regard to the implementation of the strategic transport policy objectives, including regional integration and economic growth.
# Module 11 Review of the Transport Corridors in West & Central and in East and Southern Africa

## 11.2 Review of the Transport Corridors Situation in Southern Africa

By Gilbert Mbae Maeti

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>1.1</td>
<td>Background to Corridor Development</td>
<td>3</td>
</tr>
<tr>
<td>1.2</td>
<td>The Purpose of the Corridor Guidelines</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Current Financing Mechanisms and Human Resources Deployment for Corridor Institutions in Africa</td>
<td>4</td>
</tr>
<tr>
<td>2.1</td>
<td>Financing of Transport Corridors in Southern Africa</td>
<td>4</td>
</tr>
<tr>
<td>2.2</td>
<td>The Role of Human Resources in the Effective Functioning of CMIs</td>
<td>7</td>
</tr>
<tr>
<td>2.3</td>
<td>Experiences of CMIs from ESA and Rest of Africa</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Proposed Guidelines on the Financial and Human Resources Required to Ensure Effective Functioning of Corridor Management Institutions</td>
<td>10</td>
</tr>
<tr>
<td>3.1</td>
<td>Structure of the Guidelines</td>
<td>10</td>
</tr>
<tr>
<td>3.2</td>
<td>Guidelines on Financial Resources</td>
<td>11</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Key Elements on Sustainable CMI Financing Modalities;</td>
<td>11</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Restructuring of Financing Modalities if Prevailing ones are not Sustainable...</td>
<td>11</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Preparation of Budget Estimates for CMI Operations</td>
<td>12</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Identifying Potential Sources of Funding for CMIs</td>
<td>12</td>
</tr>
<tr>
<td>3.3</td>
<td>Human Resources</td>
<td>13</td>
</tr>
<tr>
<td>3.3.1</td>
<td>Key Competencies for CMIs Staff Members</td>
<td>13</td>
</tr>
<tr>
<td>3.3.2</td>
<td>Capacity Building in CMIs</td>
<td>13</td>
</tr>
<tr>
<td>3.3.3</td>
<td>Proposed CMI Organisational Charts</td>
<td>14</td>
</tr>
<tr>
<td>3.3.4</td>
<td>Job Specifications for CMIs Staff</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Annexes</td>
<td>16</td>
</tr>
</tbody>
</table>
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>AUC</td>
<td>African Union Commission</td>
</tr>
<tr>
<td>ACMA</td>
<td>African <em>Corridor</em> Management Alliance</td>
</tr>
<tr>
<td>CCTTFA</td>
<td>Central Corridor Trade and Transport Facilitation Agency</td>
</tr>
<tr>
<td>CMI</td>
<td>Corridor Management Institution</td>
</tr>
<tr>
<td>DBSA</td>
<td>Development Bank of Southern Africa</td>
</tr>
<tr>
<td>DCC</td>
<td>Dar es Salaam Corridor Committee</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>KPIs</td>
<td>Key Performance Indicators</td>
</tr>
<tr>
<td>MCLI</td>
<td>Maputo Corridor Logistics Initiative</td>
</tr>
<tr>
<td>NCTTCA</td>
<td>Northern Corridor Transit Transport Coordination Authority</td>
</tr>
<tr>
<td>PMAESA</td>
<td>Port Management Association for Eastern and Southern Africa</td>
</tr>
<tr>
<td>PTA Bank</td>
<td>The Eastern and Southern African Trade and Development Bank</td>
</tr>
<tr>
<td>SSATP</td>
<td>Sub Saharan Africa Transport Programme</td>
</tr>
<tr>
<td>TCC</td>
<td>Trans Caprivi Corridor</td>
</tr>
<tr>
<td>TKC</td>
<td>Trans Kalahari Corridor</td>
</tr>
<tr>
<td>WBCG</td>
<td>Walvis Bay Corridor Group</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Background to Corridor Development

The Corridor approach has been adopted globally as an effective trade and transport logistics delivery model to transport goods and move transport equipment over territorial confines and across international frontiers. It has therefore become a popular model to address the endemic challenges facing trade and transport logistics in the African continent. The Programme for Infrastructure Development for Africa referred to as PIDA\(^1\) adopts the corridor approach in the delivery of the planned continental transport infrastructure connectivity.

It largely adopts the transport corridors identified in the various initiatives undertaken to develop transport links to boost continental integration through economic and social interactions. It encompasses a multidisciplinary approach that deals with transport infrastructure, provision of transport services.

The primary role of the transport corridor is to reduce the cost of conducting trade across two or more countries through the provision of connected transport infrastructure along designated routes and applying a set of harmonized trade and transport facilitation instruments. In this respect, the Corridor system by reducing the transport logistics costs also facilitates movement of persons, enhances regional economic integration and promotes economic growth among the interconnected countries and regions.

While over the past two decades, the transport corridors established in the continent have accorded priority on enhancing interconnectivity and facilitating trade, the White Paper has embraced the concept of Smart\(^2\) Corridors where emphasis has been put on providing Intelligent Transport Systems (ITS) to enhance improvements to trade facilitation policies, along with harmonized up-grading of all the transport modes along the corridor.

The Smart Corridor approach entails the use of cross-border ITS technologies, WTO / WCO trade facilitation tools, REC agreed trade facilitation policies, laws, regulations, procedures and safety measures; and quality transport infrastructure.

The African Union (AU) has prioritized infrastructure in transport, energy, ICT and trans-boundary water resources as a critical item in achieving the goal of continental economic and social integration. The AU is preparing a White Paper on Transport Policy\(^3\) that sets out the policy actions in line with the PIDA priorities that seeks to address the continental transport physical infrastructure connectivity together with accompanying logistics by underscoring the role of transport corridors as facilitators of integration and spatial development on the African continent.

The White Paper covers four cross cutting and five modal transport areas. The cross cutting policy areas include the following:

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\(^1\) The PIDA Programme is the final outcome that culminated from the Short term and Long Term Infrastructure Action Plans under the NEPAD Initiative

\(^2\) Provided in the AU Draft White Paper

\(^3\) The AU White Paper is in draft form and is expected to inform on the preparation of various transport sector Guidelines.
• Improvement of regional and continental connectivity;
• Development of a sustainable transport system that is friendly to the environment;
• Improvement of governance of the transport sector; and
• Institutional frameworks

The modal transport policy areas include, Road Transport Services, Rail Transport, Waterborne transport, Air Transport; and Multimodal Transport. On surface transport, the African Union has prioritised the development of transport corridors consisting of designated transport routes and intended to facilitate both regional and international trade.

1.2 The Purpose of the Corridor Guidelines

The Corridor Management Institutions (CMIs) established to manage the transport corridors in the Eastern and Southern Africa region have had varied experiences with respect to organising their financial and human resources in order to effectively and sustainably discharge their mandates.

The scope of this paper is to produce a set “operating instructions” with the required information to recommend the establishment of CMIs when they don’t exist or to strengthen them when they already exist making reference to Southern Africa. The expected output is to develop guidelines on Financial and human resources required to ensure effective functioning of the CMIs.

The guidelines will provide reference material on financial and human resources matters when setting up new CMIs or while restructuring existing ones that may not be functioning effectively.

2 Current Financing Mechanisms and Human Resources Deployment for Corridor Institutions in Africa

2.1 Financing of Transport Corridors in Southern Africa

The SADC region constitutes the primary hinterland served by the Southern Africa transport corridors. The corridor development and management in the SADC region is guided by the dictum of “Instruments, Institutions, Infrastructure and Implementation” which is in line with the organisation’s Protocol\(^4\) dealing with the development, utilisation and management transport and ICT infrastructure and provision of services.

The eleven main corridors serving the Southern Africa region originate from the ports of Dar es Salaam, Mtwara, Nacala, Beira, Maputo, Durban, Walvis Bay, Namibe and Lobito. Out of these main corridors, four namely; Dar es Salaam, Maputo, Trans Kalahari and Trans Caprivi already have functional Corridor Management Institutions (CMIs). The remaining ones namely; North South Corridor, Trans Cunene, Namibe and Lobito/Benguela which have also adopted the MOUs as

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\(^4\) The SADC Transport, Communications and Meteorology Protocol
their enabling instruments are at various stages of negotiating and concluding these instruments with facilitation from the SADC Secretariat.

Once a CMI is set up for a corridor, it creates an operating institution which has an annual budget in order to carry out its work prorammes. The financing of the budget in a CMI is an important issue. This is in order to ensure that the CMI generates sufficient resources to ensure its sustainability over time. The funding for CMIs in Southern Africa is through a combination of member states contributions, contributions by private stakeholders and through grants extended by development banks and aid provided by cooperating partners. In East Africa funding mechanisms have evolved to include payments through cargo levies, government contributions and grants from partners.

The issue of sustainable funding for the CMIs in Southern Africa has been of great concern because the existing CMIs in the Dar es Salaam, Maputo and Walvis Bay corridors have not been able to raise sufficient funds to cover their annual work programmes. In the case of Dar es Salaam Corridor, contributions from the members who are signatories to the Constitution have not been able to meet their assessed contributions.

Similarly, for the Maputo Corridor, only the twelve founding members have managed to meet their financial obligations while the other members have not managed to meet their assessed contributions. In the North South Corridor, negotiations to conclude an MOU covering South Africa, Botswana, Zimbabwe, Malawi, Zambia and Congo DR have been long drawn because the issue of the funding mechanism has not been agreed upon. Once the funding mechanism is agreed upon, MOU should be concluded and signed.

Table 2.1 below, shows the corridors in Southern Africa and the funding mechanisms for those with CMIs.

<table>
<thead>
<tr>
<th>CORRIDOR NAME</th>
<th>CMI NAME (EXECUTIVE AGENCY)</th>
<th>ENABLING INSTRUMENT</th>
<th>FUNDING MECHANISM</th>
<th>PARTICIPATING STATES</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dar es Salaam Corridor</td>
<td>Dar es Salaam Corridor Committee (DCC)</td>
<td>Constitution</td>
<td>Member contributions</td>
<td>Tanzania, Malawi, Zambia and Congo</td>
<td>The 4 participating states developing an MOU for signature</td>
</tr>
<tr>
<td>Maputo Corridor</td>
<td>Maputo Corridor Logistics Initiative (MCLI)</td>
<td>Company Registration</td>
<td>Member contributions</td>
<td>Mozambique, South Africa and Swaziland</td>
<td>MOU between Mozambique/ South Africa on corridor development</td>
</tr>
<tr>
<td>Trans Kalahari Corridor</td>
<td>TKC Secretariat</td>
<td>MOU</td>
<td>Member contributions</td>
<td>Namibia, Botswana and South Africa</td>
<td>MOU signed by Namibia, Botswana and South Africa</td>
</tr>
<tr>
<td>Trans Caprivi Corridor</td>
<td>Walvis Bay Corridor Group</td>
<td>MOU</td>
<td>Cargo levy but currently funded by WBCG</td>
<td>Namibia, Zambia and Congo DR</td>
<td>MOU signed by Namibia, Zambia and Congo DR</td>
</tr>
</tbody>
</table>

5 The DCC is exploring alternative funding models, including user pay system, as current system is unsustainable
6 MOU signed in 2010 but though Secretariat not yet established, corridor is administered by the Walvis Bay Group
MODULE 11 REVIEW OF THE TRANSPORT CORRIDORS

| Corridor                  | MOU                              | MOU proposes a cargo levy | MOU signed by
<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Mtwara Corridor</td>
<td>Mtwara Dev Corridor</td>
<td>MOU</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>Nacala Corridor</td>
<td>Nacala Logistics Corridor (NLC)²</td>
<td>MOU</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>Beira Corridor</td>
<td>Beira Corridor Group</td>
<td>MOU</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>North/South Corridor</td>
<td>NSC Secretariat²</td>
<td>MOU</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>Trans Cunene Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>Namibe Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
<tr>
<td>Benguela/Lobito Corridor</td>
<td>NA</td>
<td>No Instrument</td>
<td>Tanzania, Malawi, Mozambique, Zambia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOU Mozambique, Malawi, Zambia</td>
</tr>
</tbody>
</table>

Table 2.1. Corridors in Southern Africa

An evolution of funding mechanisms for CMIs in Eastern and Southern Africa can be traced from the experiences of the Northern Corridor. The Northern Corridor was established in 1986 through an intergovernmental agreement entered by beneficiary states⁹. It had the relevant governance structures and an executing agency with dedicated staff. Initially the regular budget was funded through direct contributions by the four partner states assessed on the basis of the levels of traffic passing through the port of Mombasa.

However, in a few years, most of the partner states started falling into accumulated arrears in their contributions necessitating a review of the funding mechanism. Following a study undertaken on behalf of the NCTTCA, a recommendation for the introduction of a cargo levy¹⁰ was adopted by Burundi, Congo DR, Rwanda and Uganda while Kenya opted to continue with direct contributions from its treasury.

Following the establishment of the Dar es Salaam Corridor CMI, an institutional and financial sustainability study¹¹ was conducted and came up with the following observations about the mechanisms of funding the CMIs.

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⁷ Governance institutions provided under the MOU but not operational but a consortium headed by Vale of Brazil and Mozambique
⁸ CFM North has initiated a corridor management entity
⁹ The founding members of the Northern Corridor are Burundi, Kenya, Rwanda and Uganda while DRC and South Sudan acceded to the Agreement.
¹⁰ The Cargo Levy is also referred to as a Tonnage Levy
¹¹ Dar es Salaam Corridor Institutional Sustainability Study; Chemonics International, Inc., 2004
• Membership contributions are generally problematic whether by the private or public sector. In particular, governments have competing and more urgent priorities making it difficult for them to keep up with their assessed contributions to the CMIs;

• User levies if applied would have to be directly related to the derived benefits. What the users pay must be less than the derived benefits;

• Where there is no clear linkage between the budget and the results or benefits, it becomes difficult to justify the levy;

• Where there is result-based budgeting with clear targets for deliverables, justification for a levy is not difficult; and

• The mode of collection of the levy need to be simple to administer and to be amenable to adherence.

The findings from both the Northern Corridor and Dar es Salaam Corridor have informed on the need to adopt a funding mechanism that generates a predictable and steady flow of funds to enable the CMI to finance its work programmes.

2.2 The Role of Human Resources in the Effective Functioning of CMIs

In addition to the governance structures provided for in the establishment of the CMIs, an executing agency designated as the Secretariat has usually been in most occasions established with permanent staff headed by a Chief Executive.

The human resources factor is crucial to the effective functioning of the CMI. This is because the competency of the CMI staff will determine the quality of work undertaken in support of the corridors through the various work programmes. The effective functioning of the corridor will depend on the availability and deployment of skilled and personnel with the requisite skills and experience to discharge their responsibilities in line with their respective mandates.

The CMIs personel will need to be equipped with skills and experience on issues related to policy, transport infrastructure, transport logistics, Customs procedures, transit documentation and financial management. The same personnel will further need to be able to take part in setting performance indicators, collect data to monitor performance by various service providers, engage national policy makers, regulatory authorities and carry out advocacy. In this respect, a review of the existing Corridor Secretariat establishments will be undertaken and where necessary revised establishments will be prepared providing for personnel with relevant competencies to meet organisational shortfalls.

The Secretariat’s members of staff are recruited in accordance with the skills and experience required to perform the tasks provided for under an organizational structure which constitutes the Secretariat’s establishment. The establishment contains the list of positions which contain job descriptions and have to be filled by experts with the requisite qualifications, skills and experience.
In the case of the NCTTCA is a permanent Secretariat headed by an Executive Secretary established in Mombasa in 1988. It had experts in Customs, Transport Economics and Civil Engineering as professional experts supported by professionals in finance and general support staff. The staffing of the NCTTCA Secretariat was gradual as it initially was being through secondment of staff from member states and eventually recruiting its own permanent staff on its own terms and conditions of service.

The Dar es Salaam Corridor started with the recruitment of the Corridor Chief Executive who was initially provided with support staff from the Tanzania Ports Authority with the intention of eventually recruiting dedicated staff when its funding was fully operational.

The Secretariat facilitates implementation of the policy organs decisions and provides secretarial services to all the organs of the CMI. The Secretariat is obligated to;

- Prepare work programmes, budgets and schedules of events for consideration by the policy organs;
- Undertake research, analysis and prepare technical papers for consideration by member states or for public briefings;
- Monitor the progress of the implementation of various aspects of the Agreement and determine the impact thereof;
- Identify problems or impediments and propose measures that should be taken to overcome them;
- Provide technical facilitation on the business of the policy and other CMIs organs; and
- Prepare and propose regulations, manuals and other programme implementation instruments.

The staffing of the secretariat is also expected to consider other issues such as languages used by the corridor states which may necessitate documents translation in order to facilitate effective communication across the hinterland. The Secretariat’s structure is therefore responsive to the corridor critical needs. Table 2.2 below provides a sample distribution of Human Resource by skills in Selected CMIs.

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Chief Executive</th>
<th>Professional Experts</th>
<th>Support Experts</th>
<th>General Staff (Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCC</td>
<td>Executive Secretary</td>
<td>Trade, Transport</td>
<td>Coordination, Finance/Accounts, Procurement, Information Conferences</td>
<td>Secretarial, Record keepers, Others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing, Lobbying</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCLI</td>
<td>Chief Executive</td>
<td>Chief Operating</td>
<td>ICT and Administration Manager, Event Administrators</td>
<td>Administrative Assistants (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TKC</td>
<td>Executive Director</td>
<td>Transport Expert, Customs Expert</td>
<td>Office Administrator</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.2. Human Resource Distribution in Selected CMIs

Capacity building for CMIs is important for both incumbent and for newly recruited members of staff. This capacity building can be achieved through direct induction or through joint training provided with support from entities such as the ECA, World Bank SSATP, NEPAD, PMAESA. Capacity building could also be enhanced through visits secondment to each other and generally direct sharing of information and experiences. Currently a programme of deeper cooperation among African corridors is being developed through the African Corridor Management Alliance (ACMA).

2.3 Experiences of CMIs from ESA and Rest of Africa

The experiences of providing and managing financial and human resource in Eastern and Southern African CMIs can be reviewed and benchmarked against each other, with the those in the African continent and with the rest of the world. The CMIs in the Eastern and Southern Africa can be provided for the following cases:

- The Northern Corridor covering which had support from founding Partner States and has experience in restructuring of funding mechanisms and the deployment of requisite experts;
- The Maputo Corridor Logistics Initiative which had support of champions in Mozambique, South Africa and Swaziland;
- The Trans Kalahari Corridor which had the support of policy makers and users in Namibia, Botswana and South Africa and especially the Walvis Bay Group; and
- The Trans Caprivi Corridor which had the support of policy makers and users in Namibia, Botswana and Zambia and especially the Walvis Bay Group.

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12 These are proposed positions as the WBCG provides all secretarial staff to the TCC.
With respect to the above, the Northern Corridor (NCTTCA) is an appropriate case with a track record of facilitating trade and transport among its six member countries namely; Kenya, Uganda, Rwanda, Burundi, Congo DR and lately South Sudan.

The NCTTCA established in 1986 has a wealth of experience in both successes and shortfalls and has had to respond to its challenges by reviewing its enabling intergovernmental agreement, its organizational structure and its funding mechanisms. In 2014, the NCTTCA regular budget amounted to US$ 3 million of which 52% was expended on programme and 37% on personnel. The regular budget was raised through cargo levy from its five partner states and a direct contribution by Kenya. According to the budget contributions formula, Kenya pays for 30 per cent of the regular budget. NCTTCA has extra budgetary resources provided through grants and usually spent on projects and capacity building. In 2014, extra budgetary resources amounted to us$ 1.4 million.

The Maputo Corridor Logistics Initiative (MCLI) is a pioneering example of a CMI in Southern Africa which has been working to facilitate trade and transport within the three beneficially countries namely: Mozambique, South Africa and Swaziland. The MCLI has formal institutional structures covering its governance and a staffed executing agency established through company registration. Its financing mechanism has gone through reviews because of challenges it faced in raising revenue to meet its budgetary requirements.

The cumulative reports on the financial status of the MCLI indicate that due to the failure by private members to honour their assessed annual contributions, its programmes could not be fully implemented as the financial resources came only from the twelve founding members.

The latest accounts indicate that in 2011, MCLI had an operating revenue of about US$ 375,000. This is a modest sum compared with the NCTTCA primarily because the MCLI has a thin establishment and its scope of coverage in terms of programming is not as wide as that of NCTTCA.

### 3 Proposed Guidelines on the Financial and Human Resources Required to Ensure Effective Functioning of Corridor Management Institutions

#### 3.1 Structure of the Guidelines

The main purpose of this paper is to prepare guidelines to facilitate the development, establishment of financial and human resources required to ensure effective functioning of corridor management institutions.

In the existing CMIs, funding for the core operating budget is normally through cargo levies on both exports and imports or through direct contributions by member states assessed on the basis of the volumes of traffic passing through the maritime ports. The resources for the funding of corridor projects has also been provided by cooperating partners who include multinational development banks, agencies and aid from development agencies of developed countries.

This chapter will contain guidelines on developing and implementing sustainable financing mechanisms and establishing a robust system of handling the human resources component of the
CMIs. The following issues will be considered when dealing with financial mechanisms for funding the corridors:

- Key Elements on Sustainable CMI Financing Modalities;
- Restructuring of Financing Modalities if Prevailing ones are not Sustainable;
- Preparation of Budget Estimates for CMI Operations; and
- Identifying Potential Sources of Funding for CMIs

The following issues will be considered in planning, deployment and management of the human resources element for specific corridors:

- Key Competencies of Experts to Manage and Operate Successful CMIs;
- Proposed CMI Organisational Chart; and
- Job Specifications for CMIs Staff;

3.2 Guidelines on Financial Resources

3.2.1 Key Elements on Sustainable CMI Financing Modalities;

In order to ensure sustainable financing of the CMIs in order to discharge their functions, the following are key issues:

- A reliable source of funding to provide steady flow of income to meet the regular budget of the CMI;
- An easy and inexpensive method of collection and transfer of funds to the Secretariat;
- Secondary sources of funding especially from developing banks and cooperating partners to be applied for projects development, procurement of equipment and capacity building;
- The funding mechanism should be equitable to stakeholders so that no one shoulders a disproportionate share of the budget;
- The contributions made to the CMI should be commensurate with the services it provides to beneficiaries and should make stakeholders better off than if the CMI was not in existence.

A funding mechanism to be adopted by a CMI should guarantee it steady and sufficient budget to meet its core operating budget

3.2.2 Restructuring of Financing Modalities if Prevailing ones are not Sustainable

The broad elements on the funding mechanisms for CMI’s operations may be provided for in the enabling instrument. However, leeway needs to be given to enable the policy organs to review existing funding mechanisms and revise them where necessary in order to collect sufficient resources so as to provide for the levels of budget adequate to fund their activities.
In this respect, it is important for the CMI to develop a funding mechanism which will provide a steady and adequate budget to finance its work programmes. Where the financing modality adopted for a CMI does not yield a steady and reliable flow of budgetary resources to pay for the discharge the functions of the Secretariat, it is necessary to examine other options for the raising of funds.

In the ESA region, the Northern Corridor, Dar Corridor, MCLI and Trans Kalahari corridors initially started with direct budget contributions by member states to the CMIs but due to non-remittances by the states, they found themselves in arrears within a few years.

Due this challenge some Corridors undertook some reviews to restructure their financing mechanisms and some have already adopted cargo levy options while others have made recommendations to adopt it. The CCTTFA, Nacala and Beira CMIs have adopted the cargo levy at ports or other appropriate collection methodologies as the applicable funding mechanisms.

The following measures will be undertaken in order find the best options to take if funds are not forthcoming:

- Identify the causes of the inability to pay by the various stakeholders who have been accessed;
- Determine a steady, reliable and adequate source of funds;
- Review the modalities of collection of the resources;
- Arrange for the collection of cargo levies at ports or inland locations such as weighbridges;

3.2.3 Preparation of Budget Estimates for CMI Operations

It is standard practice for the CMIs to prepare Strategic Plans which are usually implemented through annual work programmes. In order to implement the work programmes successfully by meeting both recurrent and development budgetary resources, it will be important for the CMIs to be availed stable and predictable sources of funding.

The budgetary resources for the respective CMIs will be based on their needs to implement their work programmes. It is therefore important for the CMIs to prepare budget estimates to implement their Strategic Plans through the annual work programmes.

The regular budget which is usually raised from contributions by member states should be adequate to cater for CMIs annual operating expenses or the “core expenses”. If the regular budgetary contributions from the cargo levy or members is not sufficient to meet the core expenses, then a review of the applicable rates or the sources of funding will need to be undertaken.

Grants from development and cooperating partners when available should be used to fund projects and some types of equipment and capacity building.

3.2.4 Identifying Potential Sources of Funding for CMIs

The sources of funding for CMIs can vary but the primary ones are:

- Members States;
• Stakeholders (Direct Beneficiaries);
• Development Banks;
• Cooperating Partners; and
• Other Sources

A summary of Sources of Financing for CMIs in the Eastern and Southern Africa region is provided on Table 3.2 below.

<table>
<thead>
<tr>
<th>Funding Entity</th>
<th>Source of Funds</th>
<th>Method of Payments</th>
<th>Recommended Area of Utilisation</th>
<th>Examples in ESA Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member States</td>
<td>National Budgets</td>
<td>Direct annual Contributions</td>
<td>Core CMI operations</td>
<td>NCTTCA, TKC</td>
</tr>
<tr>
<td>Stakeholders (Direct Beneficiaries)</td>
<td>Cargo passing through Corridors</td>
<td>Cargo levy</td>
<td>Core CMI operations</td>
<td>NCTTCA, CCTTFA,</td>
</tr>
<tr>
<td>Corridor Members</td>
<td>Member’s Incomes</td>
<td>Assessed Annual Fees</td>
<td>Core CMI operations</td>
<td>Dar Corridor, MCLI,</td>
</tr>
<tr>
<td>Development Banks (AfDB, World Bank)</td>
<td>Grant Allocations</td>
<td>Grants</td>
<td>Projects, equipment and capacity building</td>
<td>NCTTCA, CCTTFA</td>
</tr>
<tr>
<td>Cooperating Partners (EU, JICA, USAID)</td>
<td>Foreign Aid</td>
<td>Grants</td>
<td>Projects, equipment and capacity building</td>
<td>Dar Corridor, NCTTCA,</td>
</tr>
<tr>
<td>Other Sources</td>
<td>Gifts</td>
<td>Gifts</td>
<td>Projects, equipment</td>
<td>MCLI</td>
</tr>
</tbody>
</table>

Table 3.2. Sources of Funding for CMIs in the EASA Region

3.3 Human Resources

3.3.1 Key Competencies for CMIs Staff Members

The CMI requires people of relevant skills and experiences at the governance and Secretariat’s levels in order to deliver on its mandates. At the level of governance where policy making organs for the CMIs are involved, it is important to appoint people with good grounding in policy, regulatory and operational understanding of transport and trade issues.

At the Secretariat, level, the staff to be appointed to manage programmes should have clearly demonstrated understanding and experience in Customs, transport infrastructure, regulatory matters and trade and transport logistics. Other support staff dealing with accounts, administration, public relations, ICT and other organisational requirements will also be necessary.

3.3.2 Capacity Building in CMIs

The provision of trans boundary transport is complex operation involving a large number of players, trans frontier movements of goods and means of transport. It is also a dynamic exercise facing and
adapting to changes in transport and processes and procedures. Due to this, it is important to provide training of personnel in the CMIs as follows:

- Provide training through induction of new CMI employees to be familiar with the national and cross border trade and transport procedures and the need to minimise bottlenecks;
- Provide refresher training to incumbent staff in order to keep abreast with new developments in trade and transport facilitation;
- Provide familiarisation to policy makers on developments in Corridor transport processes and procedures; and
- Provide sensitisation to various stakeholders including economic operators on the existing processes and procedures or on those proposed and in the pipeline

3.3.3 Proposed CMI Organisational Charts

There are variant organisational structures for CMIs depending on the scope of work that each corridor is mandated to perform by its enabling instruments. While there exist many commonalities in the organisational structures among CMIs, additional functions in mandates will require specialist expertise in order to discharge such functions.

On the basis of the CMIs mandates, two proposed versions of an organisational charts are shown below:
3.3.4 Job Specifications for CMIs Staff

The job specification will illustrate what the manpower deployed in CMIs needs to be in possession of in terms of his skills, experience and attitudes.

Note:

The job profiles for the positions listed above will be provided once collated from inputs received from the major functional CMIs in the Eastern and Southern Africa region.
4 Annexes

Annex 1: Glossary of the Main Concepts Used in the two Reports

The glossary of the main concepts to be employed in the two reports will be provided together with the list of abbreviations and acronyms.

Annex 2: List of the Main Reference Documents Consulted

The list of documents consulted will include the following among others:

(i) CMIs enabling instruments such as treaties, agreements, MOUs and constitutions;
(ii) CMIs visions, missions, strategic plans and annual reports;
(iii) CMIs Organisational Charts;
(iv) CMIs Annual Operating and Capital Budgets;
(v) CMI Staff and Financial Rules; and
(vi) List of articles covering corridor development, management and performance reviews.
# Table of Contents

1. **Introduction** ................................................................................................................................... 2
2. **Concept of PBC** ................................................................................................................................ 3
3. **Benefits that Can Be Expected** ..................................................................................................... 4
4. **Implementation Experiences Worldwide and in Africa** ............................................................ 6
   4.1 **Canada** .................................................................................................................................... 8
   4.2 **United States of America** ...................................................................................................... 8
   4.3 **New Zealand** .......................................................................................................................... 9
   4.4 **South Africa** ........................................................................................................................... 11
   4.5 **Zambia** .................................................................................................................................. 13
   4.6 **Chad** ...................................................................................................................................... 16
   4.7 **Tanzania** ............................................................................................................................... 17
   4.8 **Liberia** .................................................................................................................................. 19
5. **Lessons Learnt** ............................................................................................................................. 21
6. **Recommendations of How to Implement Multiyear PBC on Road Transport Corridors in Africa** ............................................................................................................................................ 23
   6.1 **Types of PBCs** ...................................................................................................................... 23
      6.1.1 **Countries who are planning to implement PBCs** ..................................................... 23
      6.1.2 **Countries which want to expand their PBC program and have experienced in PBCs on unpaved roads** ......................................................................................................... 24
   6.2 **Design, Implementation, Supervision and Monitoring** .................................................... 24
      6.2.1 **Step 1: Design** .............................................................................................................. 24
      6.2.2 **Step 2: Prequalification of Contractors** ....................................................................... 27
      6.2.3 **Step 3: Tendering and Award of Contract for Works and Services** .................... 28
      6.2.4 **Step 4: Tendering and Award of Contract for Contract Supervision** ................... 28
      6.2.5 **Step 5: Implementation** ............................................................................................... 29
      6.2.6 **Step 6: Monitoring and Evaluation** ............................................................................ 29
7. **Documents available on the internet** .......................................................................................... 30
8. **Reference Documents** .................................................................................................................. 31
1 Introduction

Road conditions in many African countries are still well below the required standards. On average 30% of the main networks are in good condition. Some countries like South Africa, Burkina Faso, Kenya, Namibia have main road networks in better conditions than average and other countries like Rwanda, Benin and Senegal are lagging behind, see Figure 1.

![Road conditions in selected African Countries](image)

Figure 1. Road conditions in selected African Countries

In general road conditions have improved over the last 30 years while the road networks have more than doubled during that time. The institutional reforms programs like the SSATP road maintenance initiative have helped to create more awareness about the importance of road maintenance to the economic and social development of countries and assisted in the creation of road funds and road agencies improving the governance in the road sector. Nevertheless, road maintenance spending in most of the African countries is still well below the required levels. In addition, funds are often not allocated according to any economic criteria. Many roads do not receive enough funds for the more economic preventive maintenance that would have been necessary and need to be rehabilitated later on at a much higher cost than it would have been necessary if sufficient preventive maintenance was
being done. It is estimated that each USD not spent on routine and periodic maintenance on time will cost between 6 and 14 USD in rehabilitation cost later on, see Figure 2.

![Figure 2. Pavement Preservation is Cost Effective](image)

Poor road conditions do not only cause higher cost to the road agencies to maintain the road network but they also contribute to higher road user costs and more road accidents.

One of the best ways to ensure roads remain in good condition is to maintain roads with **multiyear Performance-Based Road Maintenance Contracts (PBC)**.

### 2 Concept of PBC

The conventional way of contracting out road maintenance is based on the amount of work being measured and paid for on agreed rates for different work items. By contrast, Performance-based Road Management and Maintenance Contracts (herein after referred to PBC) define minimum levels of serviceability of road, bridge, and traffic assets that have to be met by the contractor, as well as other services such as the collection and management of asset inventory data, call-out and attendance to emergencies, and response to public requests, complaints and feedback.

Payments are based on how well the contractor manages to comply with the performance or service levels defined in the contract, and not on the amount of works and services executed. It is up to the contractor as to how to achieve this. Therefore, work selection, design and delivery are all his responsibility. Hence, the choice and application of technology and the pursuit of innovative materials, processes and management are all up to the contractor as long as he complies with the relevant laws and regulations. This allocates higher risk to the contractor compared to conventional contract arrangements, but at the same time opens up opportunities to increase his margins where improved efficiencies and effectiveness of design, process, technology or management are able to reduce the cost of achieving the specified performance levels.
Normally PBCs are medium and long-term contracts that include routine and periodic maintenance and often spot rehabilitation as well. PBCs offer several benefits for road agencies and road users compared to the conventional contracting method of road maintenance. Therefore, an increasing number of road agencies worldwide have started to move towards PBC (Zietlow 2004).

### 3 Benefits that Can Be Expected

The main reason why developed countries changed from conventional contracting of road maintenance to PBCs is the potential of reducing the overall cost for maintaining roads. Reported savings are typically between 15% and 30% when compared with the same scope of works undertaken by conventional unit price contracts. Table 1 illustrates reported savings in some countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Reported Savings against Conventional Unit Price Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta, Canada</td>
<td>About 20%</td>
</tr>
<tr>
<td>Australia</td>
<td>10 – 40 %</td>
</tr>
<tr>
<td>Brazil</td>
<td>15% - 35%</td>
</tr>
<tr>
<td>Estonia</td>
<td>20 -40%</td>
</tr>
<tr>
<td>Holland</td>
<td>30-40 %</td>
</tr>
<tr>
<td>New Zealand</td>
<td>15 – 38%</td>
</tr>
<tr>
<td>Norway</td>
<td>20 – 40%</td>
</tr>
<tr>
<td>Finland</td>
<td>18%</td>
</tr>
<tr>
<td>USA</td>
<td>10-15%</td>
</tr>
</tbody>
</table>

Source: Pakkala 2007 and others

Table 1: Reported savings of PBCs against conventional contracts

Generally, cost reductions increased when contractors faced strong competition and have gained experiences with PBCs. Since PBCs are fixed price contracts, contractors have an incentive to maintain the contracted performance levels at the lowest cost possible. The longer the contract duration the higher is the incentive. Besides competition, modern management and work procedures, increased labour productivity, total life cycle costing, just in time maintenance and better use of latest technologies have driven down cost. A well-documented case for demonstrating the importance of good competition for driving down cost is illustrated in Box 1.

For developing countries, the main driving force to introducing PBCs is the need to better secure sufficient long term financing for road maintenance and guarantee better road conditions. Good examples are Malaysia, Argentina and Uruguay.
For the same reason, Malaysia introduced area-wide PBCs in the year 2000 with 15-year duration on all its national roads and was successful in securing sufficient road maintenance funds during the entire contract period. The same applies to Argentina and Uruguay. Even during the economic crisis in both countries in 2002 the governments honoured their commitment towards all PBCs. In most of the other developing countries, especially in Africa and Asia, the International Financial Institutions, led by the World Bank, convinced governments to explore PBCs by financing pilot projects with the long term view to improving both long term sufficient road maintenance funding and road network conditions.

---

**Box 1: Reducing road maintenance cost through competition and the introduction of performance based road maintenance contracts**

In 1990 the Road Transport Authority (RTA) of New South Wales initiated the development of a pilot road maintenance contract project in its Sydney region. The objectives of the pilot were to establish the feasibility of contracting road maintenance and to measure differences in cost, quality, and responsiveness between a contractor and the RTA workforce. RTA initiated a pilot by choosing two equal long road sections of 100 km with similar road conditions. One section was given to an RTA team to maintain and the other one contracted to the private sector for 2 years and twice retendered after 2 years each. Both the RTA team and the contractor were supervised by a consultant and were subject to the same technical specification, which defined the level of performance, in terms of intervention standards. The graph below illustrates how good competition can reduce maintenance cost over time. After the third tender round maintenance cost was reduced by 48%. In addition, the 5-year performance contract on urban roads in Sydney produced even more savings. This example clearly demonstrates that shifting from in-house works to contracting out based on conventional maintenance contracts with unit prices produces big savings already, but by introducing performance based contracts savings can increase even more. In this case the total savings amounted to more than 60% compared to the cost of delivering maintenance in-house.

![Graph illustrating maintenance cost reduction](http://www.zietlow.com/docs/frost.htm)

Besides the potential of reducing road maintenance cost and secure long term financing, PBCs help:

Road Agencies to

- save on rehabilitation cost, since roads in good condition avoids rehabilitations
- safeguard against cost overruns by frequent claims and contract amendments to increase quantities of work
- reduce work load of staff
- improve the quality of works
- improve control and enforcement of performance levels
- improve road safety

Road users to

- save on road user cost
- encounter better and safer roads with consistent conditions

Contractors and Consultants to

- guarantee more equal workload over longer periods
- improve the potential for increased margins
- develop excellent opportunities for business growth

4 Implementation Experiences Worldwide and in Africa

PBCs have a relatively short history. The first contracts started in 1988 in Canada and gradually spread all over the world in developed as well as developing countries. The implementation of some PBCs in developed as well as developing countries in Africa is discussed to see what has worked and what did not and what lessons can be learned for the development of PBCs in Africa in the future. The development of PBCs in Canada, New Zealand, United States of America, South Africa, Tanzania and Liberia will be analyzed.

PBCs in developed countries were mainly initiated by the road organizations in the respective countries. The initiative to start PBCs in developing countries mainly came from International Financial Institutions, especially from the World Bank (Guericke, B. 2014) and other Regional Development Banks as well as bilateral development programs ¹.

The development of PBCs started in the late 1980s and early 1990s. In 1988, British Columbia in Canada started to contract out road maintenance to the private sector introducing some performance levels for routine maintenance. Two years later, Argentina contracted out almost half of its national roads using end result performance specifications for maintenance services including periodic maintenance and spot rehabilitations, with a penalty system for not meeting response times for rectifying deficiencies. By now all national roads and most of the provincial roads are maintained under PBCs.

¹ See: www.zietlow.com
In the mid 1990s other countries in Latin America such as Uruguay, Chile, Peru and Brazil started their first PBC pilot projects. At the same time PBCs developed in Australia and New Zealand as well as in the United States of America and Finland, Denmark and Estonia in Europe. Many other countries followed after the year 2000. The map in Figure 1 shows the application of PBCs across the world in the year 2006.

Almost all countries shown in Figure 3, which were in the early stage or preparing to launch PBCs have implemented such contracts by now. Several other countries have followed since then. In some countries PBCs have replaced the conventional way of contracting out road maintenance almost entirely, like in Canada, Argentina, Malaysia or Estonia. The rapid spreading of PBCs worldwide indicates that such contracts deliver better value for money than conventional contracts and are able to guarantee good road conditions at the same time. It can be expected that this development will continue to spread and PBCs will eventually replace the conventional way of contracting out road maintenance.

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Figure 3. Application of Performance-Based Contracting to Manage and Maintain Roads Across the World Canada, New Zealand and the United States of America are good examples of how to implement PBCs in developed countries successfully.

4.1 Canada

The Province of British Columbia in Canada was a pioneer in outsourcing of road maintenance under performance based contracts in Canada in 1988. Later on, Alberta (in 1995) and Ontario (in 1996) followed. In 2006 British Columbia and Alberta maintained 100% and Ontario 60% of their provincial highways under hybrid type PBCs. All provinces took a stepwise approach starting with contracts of between 3 to 5 years duration. While gaining experiences they gradually extended the PBCs up to 10 years. Contracts include routine maintenance and winter services, patrolling and emergency assistance. Periodic maintenance (resurfacing) and rehabilitations are excluded.

When the Province of British Columbia first introduced PBCs they went from in-house road maintenance to performance based road maintenance contracts directly. The government employees working in the road maintenance were offered the following options:

- Accept employment with the successful contractor in the district.
- Stay with the government and fill vacant positions anywhere in the public service.
- Take the early retirement package (if they were qualified).
- Resign.
- Severance pay was not available under any option.

At the end of the privatization for the first round of contracts in 1988, 2,280 employees were transferred to the new Road and Bridge Maintenance contractors, 20 employees stayed with the government, a few resigned, and about 200 took early retirement. In 1995, companies owned by ex-government employees held 16 contracts and controlled 57% of the total value of all 28 contracts. (PBC Resource Guide, WB 2009)².

Canada has expanded PBCs to other provinces as well and is now almost exclusively maintaining its road networks under PBCs.

4.2 United States of America

In December 1996 the Virginia Department of Transportation (VDOT) in the USA awarded to VMS, Inc. (VMS) a contract for asset management and maintenance of 1,250 lane miles or approximately 250 miles of interstate highways. The contract was developed on the basis of performance criteria with clearly defined outcomes. This contract was the first road asset management and performance based contract in the United States of America and an innovative approach to provide a high and well-defined quality of service to the user at lower cost. Interestingly, VMS was an independent company with two consulting firms as prime investors, which made an unsolicited offer to VDOT for this contract, sensing that this line of business was especially suited to consulting firms and was going to have a great future in the US, which it was. VDOT estimated to save with this contract approximately

² For more information of the PBCs in Canada see: http://www-esd.worldbank.org/pbc_resource_guide/Cisse-Canada.htm
16% over the five and one-half year contract period by maintaining the highway in its existing conditions. A report issued by VDOT in December 2000 showed that actual conditions indicate significant improvements resulting in further savings. In addition, VMS implemented a number of pavement material innovations, including Roadflex, Novachip, and a crack seal program that improved the service life of the interstate highways as well as a mobile patcher. With a “just-in-time” delivery of maintenance services the contractor engaged resources – labour, materials and equipment – on an as needed basis. This lowered total cost by avoiding excess inventory and under utilization of resources.

Under the contract, VMS was responsible for managing and maintaining the following features to pre-established outcomes:

- Pavement
- Roadside Assets
- Drainage System
- Bridges
- Vegetation & Aesthetics
- Traffic Services
- Emergency Response Services
- Snow and Ice Control

Under the contract, VMS was also responsible for traffic control and assistance to the Virginia State Police and to local police and fire authorities. VMS’ response time was 20 minutes during normal working hours and 40 minutes during non-working hours. After major incidents a critique of how well VMS responded and managed traffic control was performed. In addition, VDOT submitted questionnaires to all nine Virginia State Police units along the interstate corridors managed by VMS. Past results indicated that VMS’ performance was highly appreciated.

In-house staff has provided only approximately 15% of VMS’ services. The remaining services were subcontracted. In order to raise the quality of services of subcontractors and improve competition among them, VMS engaged in an extensive training program for small contractors. In this way, better quality could be provided at lower cost. (Lande 1999 and VDOT 2000). Since then, several other states in the US have implemented PBCs (Hymen 2009).

4.3 New Zealand

In 1998 Transit New Zealand implemented the first 10-year performance-specified maintenance contract (PSMC). Under this contract the maintenance provider was responsible for maintaining the road network to meet a number of Key Performance Indicators (KPIs). Two years later, Transit NZ introduced a shorter version, so-called “hybrid” contracts, which incorporate features of conventional method-based and performance-specified maintenance procurement. These contracts typically run for a period of 5 years. By 2006 PSMCs were used on 15% of the entire road network of New Zealand, predominately on national roads, which are generally sealed. At least one contract includes a mix of national and regional roads, with both sealed and unsealed roads. Recently New Zealand introduced two new types of PBCs the Maintenance Alliance Model (World Bank 2014 A) and Operations and
Maintenance Outcome Contract (OMOC)\(^3\). By now more than 45% of the national road network is maintained under one or the other form of PBC.

The PSMC consists of a 7 to 10-year contract for providing all the products or services associated with state highway network maintenance and management. In a similar way to the hybrid model, the PSMC model utilizes output-based contracting, relying on self-compliance by the supplier to ensure performance. It strives to maximize the skills, expertise, innovation and systems of the road industry, expecting higher efficiency and improved value for money. The PSMC is a single lump-sum contract, which includes:

- Bringing the assets to the contracted standards, with a provision that changes in safety legislation (standards) become contractual;
- Provision of all inspections;
- Identification, programming, prioritization and delivery of maintenance services necessary to achieve specified performance criteria; and
- Management of the integrity of the assets using a cost effective long term maintenance strategy.
- Payments are monthly and are independent of actual works and services provided, but may vary subject to meeting performance criteria (WB 2006)\(^4\)

Under the Hybrid Model, the client advised bid quantum of renewal and rehabilitation works to be completed on an Output basis, with all other maintenance activities to be completed on a lump sum basis for the outcome required. Contracts are typically 5 – 7 years in duration. Practically, the client retains the risk for the quantum of renewal works required while the contractor takes the risks associated with the quality of workmanship and the identification of the best location to undertake the works. A consultant is engaged to both monitor the performance of the contractor and to undertake the long term asset management planning activities (Guericke 2014 A).

Both the Hybrid Model and the PSMC will be gradually replaced by the new Maintenance Outcome Contract Model.

In an Alliance Model, the owner, contractor and consultant work as an integrated team to deliver specific activities under a contractual framework where their commercial interests are aligned with actual project outcomes. The key principle is that the Alliance assumes collective responsibility and takes collective ownership of all risks and opportunities, with an equitable share of the “pain” or “gain” of the project outcomes in comparison with the pre agreed targeted outturn costs. The Alliance Model uses a specific type of Cost Reimbursement method that seeks to drive the required best for project behaviour. The duration of contracts is between 7 and 10 years (NZ Transport Agency 2014).

Conventional Contracts are 3 to 5 years and range from input to output to outcome based and are used for specialist asset management activities like pavement repairs, emergency works, drainage, signage, delineators, litter control, vegetation control, pavement markings, bridge management, traffic counting and traffic operations centre. A review of the delivery models for PBCs in New Zealand is described in OPUS (2012). New Zealand is planning to expand performance based road contracts on all of its road networks.

\(^3\) [https://www.nzta.govt.nz](https://www.nzta.govt.nz)

\(^4\) For more information on PBCs in New Zealand see: [http://www-esd.worldbank.org/pbc_resource_guide/Case-New%20Zealand.htm](http://www-esd.worldbank.org/pbc_resource_guide/Case-New%20Zealand.htm)
In Africa performance-based contract elements were first introduced in road concessions in South Africa in 1995. Zambia and Chad introduced Performance Contracts in 2001 with assistance from the EU and the World Bank respectively. Until now Ethiopia, Botswana, Cape Verde, Chad, Liberia, Morocco, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Zambia have implemented PBCs, while Ghana, Kenya, Malawi, Mozambique, Namibia, Sierra Leone and South Sudan are preparing to introduce PBCs, see Figure 4. Most of these PBCs are on unpaved rural roads. In addition, there are some countries in Africa, which started toll road concessions such as South Africa, Mozambique and Senegal.

Examples for the implementation of PBCs in Africa are South Africa, Zambia, Chad, Tanzania and Liberia. Each of the countries faced different challenges during implementation, which are discussed below.

4.4 South Africa

The South African National Roads Agency, Ltd. (SANRAL) is responsible for slightly over 16000 kilometres of national roads out of which 1374 kilometres are concessioned to the private sector and 1500 km are operated as toll roads operated by SANRAL. Traditionally SANRAL used ad-measurement-based, routine road maintenance (RRM) contracts to maintain its entire road network except for the road concessions which are maintained under PBC’s. Now it has modified RRM to reflect new social objectives and introduce a performance-based approach. While the objective of effectively preserving those road assets assigned to the SANRAL is retained, a second objective is to

\[
\text{http://www.nra.co.za/live/index.php?Session_ID=2c3ba8cc2528bb42e26db6727ad6123e}
\]
develop sustainable small, medium and micro enterprises (SMEs) and affirmable business enterprises (ABEs) along its network.

To these ends:

- Entry barriers for small contractors are maintained at low levels,
- Provisions are made to reduce/eliminate the exploitation of small contractors,
- Skills training is provided.

The main contractor operates as a management contractor, while at least 80% of the work is executed by small contractors, belonging to Historically Disadvantaged Enterprises (HDEs) and SMEs, with at least 90% of this work going to black enterprises. SANRAL recommends that most of the labour employed should be from local areas so that:

- The communities take ownership of the infrastructure close to their homes;
- People are given empowerment opportunities through learning new skills;
- The developmental and transformation goals to which SANRAL aspires are met.
- Development of the labour force is a primary objective, with respect to skills required within the construction industry such as basic concrete placement and other skills such as first aid and HIV awareness, entrepreneurship training and business skills.

The main contractor bears the responsibility for training and mentoring the sub-contractors. During the recent years, a considerable number of SMEs were trained to establish successful and sustainable enterprises.

Since 1999, RRMs are “hybrid” contracts that combine performance items and traditional measured items and cover the whole national road network, except for the roads concessions. Each of the contracts covers approximately 200 km of national road network and has a duration of 3 years with a provision for a 2-year prolongation or 5 years with a 3-year prolongation on tolled roads operated by SANRAL. All national roads are being maintained under the new contract scheme, except for the road concessions.

The scope of activities under the RRM contracts include:

- the crack sealing and patching of road pavements, minor repairs to concrete pavements and structures, cleaning of drainage structures;
- repairing damaged fencing, road signs and guardrails;
- clearing refuse and debris off the road;
- maintenance of trees and shrubs, and mowing of grass;
- eradication of weeds and alien vegetation, protection against wild fires, and providing emergency assistance.

The contracts also specify certain works to be performed, and payments under conventional measurement terms at the tendered rates. Typical traditional measurement and payment items are:

- Pothole repair
- Guard rail repair, etc.

However, the SANRAL does define completion times in which repairs have to be completed and applies penalties for any delays. Penalties are split between main contractor and subcontractors.
For performance-based activities, minimum standards are set, and paid on a monthly lump sum basis. Payment reductions are being made if minimum standards are not being met. Typical performance-based items include:

- Vegetation control,
- Cleaning of culverts, drains, channels, and waterways,
- Road sign cleaning.

The above division of activities into measurement-based and performance-based stems from SANRAL’s experience that contractors tend to protect themselves against risk in some activities (e.g. pothole repair under performance-based specifications) by increasing bid prices substantially, resulting in increased costs for the Agency.

SANRAL intends to gradually include more performance-based items in the future when contractors are able to better cost their perceived risks.

Monitoring of the contracts is carried out by a Project Management Team (PMT) comprising a representative of the contractor, SANRAL and the local community. This works well in the rural areas where the local community is enthusiastic about the work but not so well in the urban areas where the local representative sees it as an opportunity for expenses and advancement. PMT has no legal status and cannot instruct the contractor.

In South Africa, unlike in many other PBCs in developed countries, periodic maintenance activities (i.e., reseal, overlays, regravelling) are not included in RRM contracts. These contracts are scheduled separately by the SANRAL across its road network using a Pavement Management System considering budgetary constraints.

Design and supervision of RRM contracts is also contracted to the private sector. A route manager carries out the site supervision. The route is inspected regularly to ascertain the presence of any hazard or damage to the road, for example potholes, debris on the road, drainage problems, damaged fencing, damaged road signs, animals on the road, and road safety issues in general.

RRM contracts ensure that the contract is responsible for the entire road network including the upkeep, maintenance, and emergency assistance. The apparent success of this type of contract as regards the state of the road network, as well as the development of small- and medium-scale contracting industry, seems to be a good example for other countries in Africa to follow.

4.5 Zambia

In 1999 Zambia started hybrid contracts for routine maintenance on all trunk, main and district roads under the Road Development Agency (RDA), whereby the off road maintenance (vegetation control and cleaning of the drainage systems) is based on service level criteria and the on road maintenance paid on unit rates. The contract duration is 3 years plus a 3-year extension and the average length of the roads 65 kilometres per contract. The off road performance based routine maintenance costs around 800 USD per kilometre. Contracts are being supervised by RDA. Unfortunately, supervision seems to be deficient due to frequent shortage of funds to buy fuel for cars, making it difficult for RDA Regional Engineers to comply with their obligation to properly supervise the routine maintenance contracts. The shortage of funds of RDA for its operations seems to be originating from the legal restriction on the sources of its operating expenditures. The expenditures of the RDA,
National Road Fund Administration (NRFA), and the Road Safety Agency together are restricted to a maximum of 10% of the national funds budgeted for the road sector. RDA normally runs out of operating funds in the early second half of the year.

In 2006 Zambia introduced 10 OPRCs for a total of 3445 kilometres for unpaved main and district roads financed by the EU and the National Road Fund Agency. Contracts include initial rehabilitation and have a duration of 4 years. The road length per contract ranges from 96 to 695 kilometres.

The bidding documents for the works were prepared by a foreign consultant using the Sample Bidding Documents for PMMR of the World Bank of 2005. Contractors were required to verify the length of each package and to design the rehabilitation works.

Local contractors were invited to bid. There was no pre-qualification. Bidders had to be registered as category 4, 5 or 6 contractors. The registration criteria did not consider the special requirements for managing PBCs, nor were the bidders required to prove that they had specific qualification for such kind of contracts. Bidders had to attend a one day pre-bid workshop and were guided by the consultant of where rehabilitation works seemed to be necessary to comply with service level criteria. The contractors also had to verify the actual length of the roads in each package. It was up to the contractor to make his assessment of the works and price the bids accordingly. As the contractors produced different designs it was extremely difficult to evaluate the bids. Finally, the lowest bidders were awarded the contract without taking into consideration the difference in the scope of works. Contractors had difficulties to understand the new concept of PBC and were learning by doing. Some of them assumed that they would be able to negotiate for additional funds if the works turned out to

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6OPRC stands for Output and Performance-based Road Contract
be different to what they had priced. At least one contractor (package 6) seems to have actually lost money on the project.

Contract supervision is done by local consultants who also had to adjust to the new system and which involved issuing works orders to ensure that the contractor properly uses his self control system and satisfies the service levels specified in the contract.

Leaving the design of the rehabilitation works to the local contractors posed problems as they were not sufficiently qualified to undertake such complex work. Only one contractor teamed up with a consultant when preparing his bid. Therefore, RDA has decided that any major rehabilitation and / or improvement works in future PBC will be paid on unit prices and only the subsequent maintenance on performance basis.

The total length of the contract packages was 2,910 km of which 400 km were paved. Some 66% of the total cost of the contracts was spent on rehabilitation works. Overall the routine maintenance costs averaged at some $2,050 per km.

A Technical Audit Report was commissioned by the EU Delegation in August 2007. Despite the difficulties experienced at the start of the OPRCs, the overall outcome was deemed positive, the quality of the works generally good and the performance specifications being achieved. It should be said that from the limited field assessment made by the team, this conclusion seems rather generous (EU Commission in Zambia. 2007).

The report further states that:

- Project preparation by RDA was poor: some of the roads were impassable and require much more works than stated in the contracts), in some packages roads are widely dispersed geographically (creating logistical inefficiencies), no materials investigations were undertaken, and no traffic predictions made. Most of the roads were not even visited by RDA before tendering and no road condition survey has been made. The contractors had to take all risks of deciding what works are required, finding appropriate materials and predict traffic.
- The larger, more experienced contractors are performing better than the smaller ones. The larger contractors provided more for the rehabilitation and were able mobilise larger amounts of equipment. Their quality control procedures are better than the ones of smaller contractors.
- One contractor has benefited from the participation of a consulting firm. Under the OPRCs the input of a consultant is most valuable as part of the contractor consortium.
- RDA ignored World Bank guidelines for implementing OPRCs that initial works that are not specified separately should not comprise more than 50% of the OPRC value.
- Improvement works should be specified and billed separately within the OPRC.
- The interpretation of compliance with the performance criteria by the supervising consultant varies. The specifications and verification procedures should be streamlined and defined clearer.
- The provision of a training and coaching consultant experienced with the implementation of PBCs would have helped to better performance of all parties involved.

A major problem faced by the road sector in Zambia is the low absorption capacity of the road contractors. This is partly due to the rising demand for road and other civil works, the limited number of qualified engineers and technicians, the limitations on the provision of advances to contractors, the
difficulty of obtaining equipment and the low attractiveness for foreign firms to work in Zambia for a number of reasons. Nevertheless, Zambia managed to expand PBCs during recent years.

4.6 Chad

In the late 2000 the Chad government launched a competitive international tender for a 4-year pilot PBC covering 441 kilometres of unpaved main roads from Bokoro through Mongo and Mangalme to Oum Hadjer. Previously, this section was passable only during the dry season. After prequalification three bidders each presented an offer. The bids were evaluated on the basis of the monthly lump-sum fee. The contract was awarded to DTP, a subsidiary of the French firm Bouygues, in July 2001. The winning bid came in 7 percent lower than had been predicted.

As long as DTP complied with the service quality levels, it received a monthly fee of $480 per kilometre. This fee covered, among other things, fully rehabilitating the road at the outset, managing and maintaining the road for four years, monitoring compliance with performance criteria and providing basic aid in road accidents.

The contract designated four service quality criteria: passability (the road must be open to traffic), average speed attainable, user comfort, and durability (a measure of the long-term sustainability of the road). Two mechanism have been used to monitor compliance with the criteria. First, the contractor performed self-monitoring, submitting a report to the government with each monthly invoice. Second, a consultant verified the self-monitoring reports through monthly inspections. The inspections were done by an engineering consulting firm in Cameroon. Whenever the contractor failed to comply with any of the service criteria in any month, its fee was reduced (Harwig, T. et al. 2015).

None of the three parties – road agency, consultant or contractor had any previous knowledge or experience with PBC. There were basic problems of understanding both by the contractor who had not realised the detail of what he had taken on and the agency whose performance service levels were far too detailed and restrictive. The contractor had difficulties as well. Difficulties grew during the initial stages and in 2003 the contract was frozen for 5 months whilst time was given for a resolution of the problems. The overall routine maintenance cost was an average of $2,005 per km. With light grading the cost rose to $6,200. The contract was completed in 2005.

Despite these difficulties, the road administration and the Road Maintenance Fund Board were satisfied with the experience. The road users were also happy, since the road condition was much better than before and they were able to use the road during the rainy season.

In 2006 the 441 km section was divided into two sections and each contracted to local contractors. One of the sections of 201 km was won by a contractor who had had previous training in road maintenance by an international aid organization. In addition, the monitoring consultant had worked for the Cameroonian consultant on the pilot project. There was therefore a great deal of contracting experience and in addition, some of the contractor's personnel had worked with the pilot project.

The other contract of 239 km was awarded to a contractor who had no previous experience of road works. This contractor and his staff had limited technical capacity, poor equipment and no experience in PBCs. The bid was so low that they were not able to comply with the performance service levels. Consequently, they have paid penalties for every month since the monitoring consultant was
employed. Matters were made worse by the fact that payment of monthly invoices was many months behind the contractual obligation.

The contractor argued that they suffered from the strict and rigid application of the performance indicators. This seems to have been a major issue as the contract stipulated clear and demanding criteria for the performance indicators. These criteria have been applied rigorously and have resulted in penalties for nearly every month of the contract. Whether this reflected a less than flexible attitude of the road agency and the monitoring consultant or an inability to appreciate the detail of the PBC system by the contractor is not clear.

Both contractors also suggest that the cost of rehabilitation was much higher than could have been foreseen because of the delay between the end of the pilot project and the start of the second phase projects. Finally, they argued that the traffic levels have tripled since the start of the project in 2006 in some part due to the amount of military and humanitarian aid vehicles going towards the eastern border with Sudan. It is however also true that one of the contractors have had great difficulty in obtaining good equipment and that his lack of knowledge of the PBC system has created problems in its application.

PBCs are also being applied to some rural roads. In the South, 900 km have been contracted over a four-year period to local contractors in 8 packages. It is intended to extend the system to areas around Lake Chad and in the North of the country.

4.7 Tanzania

The concept of Performance Based Management and Maintenance of Roads (PBC) was introduced in Tanzania in 2004 under a World Bank initiative. Tanzania was one of four countries to participate in this WB initiative. Preparation of the project started in July 2004 and the procurement process of works started in November 2005. A total of 1,056 kilometres of regional unpaved roads were selected to be included in the 6 pilot project. The first contracts were signed in October 2007. Contract starting date for the two contracts in Rukwa was on 16th of December 2007 and for the two contracts in Mwanza on 15th February 2008. The 2 contracts in Tanga suffered substantial delays due to poor response by local contractors. The Tanzanian experience on PBC is therefore based mainly on preparation and procurement of works, selection of consultants and initial start-up (Massawe. S.J.M. 2008).

As PBC was a new concept in Tanzania, consultations were held with stake holders such as: Ministry of Works, Road Fund Board, National Construction Council, Contractors Registration Board, Tanzania Road Association, Engineering Registration Board, the contractor’s associations (CATA AND TACECA) and the consultant’s association. In addition, the concept was presented at the TANROADS annual meeting, which was attended by senior TANROADS staff from all regions in the country.

The benefits of PBC were seen in:

- reduced management demand by the Agency,
- road users pay for the agreed service levels instead of inputs,
- the right incentive is given to the contractor of reducing maintenance cost compared to the conventional method where the contractor’s incentive is to increase inputs,
• efforts spent on procurement are reduced as it is done once in five years,
• emergency cases can be attended at a reasonably shorter period as the contractor is on site all the time,
• encouraging innovations by contractors on how to efficiently and effectively manage the roads, and
• the long contract period that will attract contractors to work in remote regions like Kigoma, Rukwa, etc.

The design works were done by a foreign consultant in 2004. The main task was to set appropriate service levels and make preliminary cost estimates based on the likely scope of works. The actual design was left to the contractors who would have to make their design in accordance with the general specifications used for such roads in Tanzania and to meet the service levels.

The contract packaging was based on the following strategies:

• provide the best possible condition for local contractors’ participation,
• spread fixed cost for contractor establishment and Self Control Units over a reasonable network length to maximize resource use and keep per km cost down, and
• define networks that are reasonably continuous to avoid the expense of wasted time and effort travelling between sites.
Besides a supervising consultant, the pilot projects include a facilitating consultant for providing technical and managerial guidance and training to the local supervising consultants, contractors and employer’s staff. Facilitation consultants were invited internationally and supervising consultants were invited nationally. The involvement of the supervision consultant was delayed due to the late conclusion of the works contract. The contract for the facilitation consultant took two years to finalise and was signed 5 months after the start of the first works contract started in December 2007.

A detailed description and the lessons learnt on these PBCs can be accessed through the internet under the link: http://www.tanroads.org/PMMR%20Final%20Report%202013%20.pdf

4.8 Liberia

Liberia let two long-term PBCs on paved roads under the Design Build Maintain Operate and Transfer scheme in the year 2012. One road (lot 1) from Monrovia to Gbarnga is 176 km long and the other one (lot 2) from Gbarnga is 70 km long. Both roads needed substantial rehabilitation works of more than 50% of the contract amount. In the first case the rehabilitation period was 36 months and in the second case 18 month. Both periods were extended to 53 months and 28 months respectively due to the outbreak of Ebola.

The Sample Bidding Document of the World Bank (World Bank 2006) was used and adapted to the specific situation in Liberia. Key features included requirements such as

- functional requirements
- general specifications
- technical specifications
- drawings

The Right of Way was clearly defined and the key geometric and design parameters provided and the environmental, social and legal framework defined.

For the conceptual design a minimum acceptable standard was required at bidding. The pavement residual life time is 10 years, which need to be proven by deflection of the pavement at the end of the contract period.

The road roughness at the end of the rehabilitation period was much better (IRI 1.7 m) than the maximum value of IRI 2.0 m for the rehabilitated pavement. Also the deflection of the rehabilitated pavement was better than planned. This indicates good quality rehabilitation works.

Both PBCs are contracted to a foreign contractor and are supervised by foreign consultants. The

Figure 7. Project road in Liberia
contractor, who did not have experiences in PBCs, partnered with a consulting firm experienced in PBCs.

The payment schedule was designed to avoid pre-financing by the contractor and to disperse profits to the maintenance phase, see Figure 8)

![Payment Schedule](image)

Figure 8. Payment schedule (Kulwinder 2016)

A symmetrical incentive and disincentive scheme is used by paying a bonus for early completion (0.5 % per month with a maximum of 3.5%) and penalties for delay of completion with a maximum of 10% of the rehabilitation works.

Besides a price adjustment formula for inflation, the contract allows for price increases due to extraordinary increases of traffic volumes and overloading of vehicles to minimise the risk to the contractor.

The guarantees for lot 1 are depicted in Figure 9.

![Guarantees for Lot 1](image)

Figure 9. Guarantees for lot 1 (Kulwinder 2016)
Some of the important results until now are:

- **Lower costs** - The project is probably delivering the lowest cost (about $0.6 million) of rehabilitation per kilometre compared to similar road projects in the entire West Africa;
- **Faster completion** - Despite significant site handover delays and due to the Ebola outbreak, 70% of the road has been rehabilitated. Nearly 80 km of road was rehabilitated post Ebola crisis during February-June, 2015
- **Expenditure reliability** - A fixed lump sum of payment to the contractor is providing expenditure reliability.
- **Local capacity** - The contract format generates local jobs, with up to 95% of the contractors’ workforce, both skilled and unskilled, being locals.

## 5 Lessons Learnt

Many lessons have been learned during the last 25 years of PBCs worldwide. This report mainly concentrates on the main lessons learned worldwide with special references to lessons learnt in Africa.

1. Performance based road maintenance contracts have become a well accepted and established form of managing and maintaining roads worldwide and are gradually replacing the conventional way of contracting, road maintenance in an accelerating manner. This is mainly due to the fact that they:

   - **Deliver good value for money.** By changing from conventional road maintenance contracts, savings between 20% and 30% have been achieved based on the same level of service. Good competition between well qualified and innovative contractors, long-term contracts and a balancing of risks between the client and contractors are the main drivers for cost savings. Where these conditions are not met PBCs might not produce savings but could result in higher prices compared with conventional contracts. Until now there is no documented evidence that PBCs have contributed to substantial cost savings in Africa.

   - **Provide better guarantee of sufficient funding for road maintenance.** Since in almost all developing countries road maintenance is heavily underfinanced, medium and long term PBCs may help to solve this problem. Good examples are Malaysia, Argentina and Uruguay.

   - **Improve road conditions, help to reduce road user cost and improve road safety.** All PBCs have resulted in better road conditions on the roads under contract and have consequently reduced the risk of accidents and contributed to shorter travel times and reduction in vehicle operating cost. It is important that once a road is maintained under PBCs it needs to continue to be contracted under the same scheme. Any interruption will jeopardize the principles of PBCs.

   - **Help to save substantial amounts of road rehabilitation and reconstruction work.** As a rule of thumb: 1 USD spent in time on routine maintenance will save between 4 USD and 16 USD on necessary rehabilitation or reconstruction works later on in constant prices.

   - **Provide better expenditure certainty for the road agencies.** Contractors are generally paid fixed monthly instalments throughout the contract period and variation orders generally are minimized or even excluded.
• **Help to reduce complaints from road users about road conditions.** PBCs provide predictable good and stable road conditions and help to increase the willingness of road users to pay for road use.

2. **PBCs need a conducive environment** for successful implementation. The most important factors are:

   • Strong commitment and support by key decision makers, especially from the Ministry of Finance, the ministry in charge of roads and the road organization;
   • Positive attitude of road organization’s staff;
   • Well qualified staff of the client, contractors and consultants to plan and manage this new kind of contract;
   • Adequate road asset management system to support the requirements of PBCs.
   • Long-term funding, and
   • A competitive market.

3. **The best way of implementing PBCs is taking a gradual approach** in line with the capacity and experiences of all parties involved. Gaining more experience will allow to increase the scope, complexity and duration of contracts. Pilot projects help to test the feasibility of PBCs and contribute to gaining experience. Since the capacity of contractors to undertake PBCs in most of the African countries is still limited, PBCs should concentrate on unpaved rural roads. Simple PBCs as in South Africa are a good alternative for the maintenance of paved roads. Long-term PBCs for paved roads still require experienced international contractors and supervision consultants.

4. **Risks shall be taken by the party who can best manage the risk.** Burdening the contractor with risks he cannot calculate or mitigate can lead to higher prices or even to premature termination of the contract.

5. **Pilot projects need careful preparation and need to be tailored to the specific conditions in each country.** A detailed road condition survey and realistic cost estimates and well designed bidding documents contribute to a successful implementation of PBCs.

6. **The selection of contractors should not be based on the lowest price,** since this has lead to unsatisfactory performance or even premature contract termination. The technical and managerial capacity need to be taken into account as well.

7. **Vehicle overloading is a major challenge to implement PBCs,** especially in many developing countries. Either the contractor will be given the power to enforce axle load limits or he needs to be compensated for unexpected high overloading. The same applies to unexpected increase of traffic volumes, which often happens when road conditions improve. This can be accomplished by introducing adjustment formulas into the PBC such as in the case of Liberia.

8. **Good supervision has turned out to be a crucial factor for success,** especially in developing countries. Whenever supervision was weak, performance of the PBC suffered. External audits may help to detect weak supervision.

9. **Pilot PBCs need coaching and training,** at least during the initial phase, until all parties involved are sufficiently familiar with the new concept. Since PBCs need a change in mind sets, the time it takes to fully grasp the concept should not be underestimated.
10. **Hardly any PBCs initiated by an International Financial Institution failed once implemented** but a few failed to get implemented for various reasons, such as lack of interest by the road organization, lack of competition or inappropriate design of the PBC.

11. **PBCs offer a procurement model that is more resistant to corruption** than conventional contracts because of fewer transactions involved and transparent easier auditing.

## 6 Recommendations of How to Implement Multiyear PBC on Road Transport Corridors in Africa

Many African countries have implemented PBCs already successfully and many valuable lessons have been learnt from these experiences. However, notwithstanding this, only a small part of the road networks in Africa are currently maintained under PBCs and several countries have not started yet.

There is a clear policy by the International Financing Institutions such as the African Development Bank, the World Bank and the European Union to continue to support the implementation of PBCs in Africa. The application of PBCs has also been endorsed by the African Road Maintenance Fund Association (ARMFA), the Association of African Road Managers and Partners (AGEPAR), and the Association of Southern African National Road Agencies (ASANRA).

Therefore, it is not a matter of whether to expand the application of PBCs in Africa, it only a question of how.

### 6.1 Types of PBCs

Due to the limited experience and capacities of road agencies, contractors and consultants to implement PBCs in Africa and taking into account the implementation experiences until now, the following options for implementing PBC are limited as well. The following options are recommended:

#### 6.1.1 Countries who are planning to implement PBCs

**Option 1**

Limited number of pilot projects (between 3 and 5) on 50 and 250 kilometres each of unpaved roads with a contract duration of between 1 to 5 years. If the road needs major initial works such as improvement or rehabilitation works, such are best paid on unit prices. Contract design shall be done by an international consultant experienced in PBCs. Supervision may be done by road agency's staff or by an experienced international consultant. If the supervision is done by road agency's staff it is recommended to employ a PBC training and coaching consultant.

**Option 2**

One or two pilot projects on between 100 and 200 kilometres of paved roads each in good or fair condition for a duration of up to 5 years. Off pavement maintenance activities and some basic pavement works to be paid on a performance basis and other more "risky" works to be paid on unit price basis. Risky works are those were the contractor would have difficulties to predict over the duration of the contract. Contract design shall be done by an international consultant experienced in PBCs. Supervision may be done by road agency's staff or by an
experienced international consultant. If the supervision is done by road agency's staff it is recommended to employ a PBC training and coaching consultant.

Option 3

One or two pilot projects on between 200 and 400 kilometers each of paved roads in conditions which need substantial rehabilitation works (up to 40% of contract value) for a duration of between 7 and 10 years. This option should be the exception rather than the rule since it requires experienced international contractors for the execution of the contract and experienced international consultants to supervise the contract. In such cases almost all of the works need to be subcontracted to local contractors. Training of these subcontractors to undertake smaller and less complex contracts later on shall be a major component of such pilot project. In addition, Road Agency's staff needs to be trained to supervise future PBCs.

6.1.2 Countries which want to expand their PBC program and have experienced in PBCs on unpaved roads

Counties with experiences in PBC on paved roads shall expand the number of roads under PBC and gradually increase their duration and complexity.

For paved roads requiring major rehabilitation option 3 above might be considered as well.

6.2 Design, Implementation, Supervision and Monitoring

In order to successfully design, implement, manage and monitor PBC in road maintenance in Africa, the following six steps are recommended:

1. Design
2. Prequalification of contractors
3. Tendering and award of contract for works and services
4. Tendering for contract supervision
5. Implementation
6. Monitoring and evaluation.

It is recommended that a qualified consulting firm should assist the client, normally the road agency, in implementing these six steps. For each step, recommendations are made based on the experiences outlined in the preceding chapters as follows:

6.2.1 Step 1: Design

The best way to start PBCs is through pilot schemes that should be carefully planned and implemented. The following tasks are necessary to design a PBC:

- Analyzing the legal and financial framework in order to see whether there is a restriction on the length of the contracts that can be let and that enough financial resources are available for the duration of the pilot scheme. If the legal framework restricts the duration of PBCs it will
be necessary to lift this restriction as soon as required. It is recommended not to start a PBC until enough financial resources can be secured for the entire contract period. As for medium and long term PBCs it is recommended to make sure that an effective axle control system is in place. If this is not the case such a system should be implemented. Experiences of how to introduce an effective axle load control system can be taken from South Africa.

- Assessing the capacity and experiences of the road administration and the local contracting and consulting industry to undertake PBCs.

- Analyzing to what extend foreign consultants and contractors might be necessary to fill a possible capacity gap. If the gap cannot be filled by foreign consultants and contractors, a simpler kind of PBC should be considered and a training scheme developed to improve the capacity of local consultants and contractors to undertake PBCs.

- Defining the kind and duration of PBCs and the roads to be included. The kind of pilot PBC (hybrid, unpaved roads) depends on the specific conditions in the specific country (legal and financial framework, capacity and experience of road agencies, contractors and consultants). PBCs on unpaved roads seem to be feasible to be undertaken by local contractors. While PBCs for paved roads will probably need foreign expertise in the form of a foreign contractor or management consultant, that would manage the PBC and employ and train local contractors. (Contracts would have to be in the order of 50 million USD or more to attract sufficient interest by foreign firms).

- Roads to be included in the pilot scheme preferably should be in “maintainable” condition and form a continuous network. Area networks should be preferred to optimize logistics. Normally, PBCs should include at least one periodic maintenance cycle. Unpaved roads should have a contract duration of between 3 to 5 years and paved roads 5 to 10 years depending on traffic volumes, while routine maintenance PBCs may have a much shorter duration. The length of the roads to be included in one contract depends very much on the kind of PBC. Pure routine maintenance PBCs may include between 20 and 50 kilometres of roads for micro-enterprises.

- Carrying out a detailed technical evaluation, that includes an initial road condition survey, detailed engineering surveys, traffic surveys, materials surveys, etc. Although the contractor is responsible for making his own assessment it is recommended to carry out a detailed technical evaluation not only to be able to make a preliminary cost estimate but to give contractors some guidance for their own investigations necessary to prepare their financial and technical bids.

- Designing the Tender Documents by:
  - Determining the scope of services and works and the scope of performance criteria of the PBCs.
    The scope services and works defines which services and works will be included in the PBC and which services and works will be paid on performance basis and which on unit price basis. The scope can vary widely from pure off road routine maintenance contracts only to very complex contracts including services like traffic information and emergency services for road users and works like improvements, rehabilitation, periodic and routine maintenance. The scope of works to be included in a PBC should be based on the capacity
and experiences of the local contractors and consultants if the pilot scheme is to be implemented by local contractors only. The lower the capacity and experiences of contractors the fewer works should be based on performance criteria in order to limit the risk to the contractor. In addition, it is recommended that improvement and major rehabilitation works should be designed and paid for in the conventional manner.

✓ **Determining and defining adequate management and operational service levels and response times.**

Adequate management service levels are those that guarantee a proper management of the contract and other services defined in the contract such as sufficient and timely reporting, quality assurance, environmental protection, emergency response, and traffic management procedures, and training and mentoring of local subcontractors. Adequate operational service levels are those that meet a set of goals such as (a) satisfying the road user concerning accessibility, comfort, travel speed, and safety, (b) minimizing total road transport systems cost, including the long-term cost of preserving road, bridge and traffic assets and the cost to the road user, and (c) minimize environmental impacts and are clearly defined and objectively and easily measurable and adjusted to take care of local conditions.

✓ **Defining operational performance standards.**

Defining operational performance standards is always a trade-off between cost and desirable service level, taking into account local conditions. Only in a few cases models like pavement management systems can give some guidance but in the majority of cases experiences and good judgment is being required. Thereby a number of factors have to be taken into account such as the objectives, road surfaces (paved, unpaved), traffic levels, climate, road conditions, affordability, and contractor’s ability to perform. For more details concerning the definition of service levels and response times, see Bidding Documents listed in the PBC Resource Guide of the World Bank (World Bank 2009).

✓ **Determining the monitoring, evaluation, payment and incentive system.**

In a PBC the responsibility for planning and controlling the works is mainly shifted to the contractor and it is his sole responsible to make sure that the service levels do not exceed the thresholds defined in the contract at any time. To take care of the importance of this new self-control responsibility, it is recommended to oblige the contractor to establish a self-control unit within its organisational structure with qualified personnel, whose task shall be to verify continuously the degree of compliance by the Contractor with the required service levels. The Self Control Unit should also responsible for undertaking the quality control testing required for all works during the performance-based maintenance period. In addition to the required self control of the contractor of the service levels, a formal evaluation of the compliance of the contractor with the service levels at the end of each month for payment purposes is recommended. The formal evaluation of the compliance of the contractor with the service levels shall be done jointly between the contractor and the supervising consultant. To minimize possible collusion, the participation by a representative of the road agency is recommended.

Based on the formal inspections the contractor shall be paid in full if he complies 100% with the service levels otherwise payment deductions shall be made based on the number, severity and importance of the non-compliance. Non compliances with service levels
should be rectified within response times defined in the contract or the contractor will face penalties for non-compliance. It is recommended to include a price adjustment formula to take care of inflation and unexpected traffic growth. Contractors should be encouraged to introduce new work methods and materials as long as they produce the same or better results as the ones they have to follow in accordance with the contract.

✓ Determining Data Management and Ownership
For a road agency it is extremely important to maintain ownership of all data necessary to monitor the PBC. As in PBCs the contractor collects most of the data that the road agency was collecting or should have collected. It is therefore necessary to establish what and how the contractor needs to do this and when he has to submit the data to the client. For pilot projects it is recommended that the contractor submits cost data as well in order to better evaluate the cost between PBCs and conventional contracts.

✓ Determining Dispute Resolution Mechanism
For pilot PBCs it is recommended to include simple and effective dispute resolution mechanism, as they are new to both contracting parties and require adjustments during contract execution.

- Estimating the likely costs
  To guide the client as well as the bidders to the likely project cost it is recommended to make a preliminary cost and cash-flow estimate.

- Determining the financing and implementation arrangements
  The budget for the PBC must be secured before engaging into the procurement process to avoid delays or possible premature project termination due to lack of funds. In addition, continued maintenance shall be secured on candidate roads before the start of the PBC even if the start is delayed.

- Designing the implementation schedule
  A realistic implementation schedule shall be designed, taking into account the longer bidding process and the uncertainty to find and contract qualified training and coaching consultants.

6.2.2 Step 2: Prequalification of Contractors

Prequalification of contractors is recommended, except for simple routine maintenance contracts. Countries normally use a classification system for road construction which is based on criteria such as annual turnover, number of staff, etc. These criteria do not take into consideration any criteria which take special care of the nature of PBC such as design and planning of works and managing interventions in order to optimize effectiveness and efficiency in complying with service level criteria. Such qualifications are more commonly found in consulting firms. Therefore, contractors should be encouraged to team up with qualified consultants to prepare the bid and to help during project implementation. Pre-qualification also increases the possibility of a bidder being successful and reduces the total cost of bid preparation to the industry in terms of wasted bids. It also means the Employer is more certain that bids will be responsive and tendering will have a satisfactory outcome.

The following tasks are necessary for the prequalification of contractors:

- Determining the prequalification criteria
With regard to conventional road maintenance contracts more emphasis should be given to the skills required for implementing PBC. For example, all bidders should either have experiences with proper Quality Management Systems or at least provide evidence of how they would be able to acquire the required skills. Whenever feasible the ISO 9001 certification shall be made a selection criteria or a precondition.

- Organizing workshop for potential bidders
  A one day workshops for potential bidders should be conducted to make them familiar with the concept of PBCs, especially detailing the risks and opportunities for contractors and the skills required by contractors to implement PBCs. In addition, the PBC to be tendered should be presented and discussed to make sure that sufficient contractors will participate in the bidding process.

- Carrying out prequalification process and establishing a list of potential bidders
  The prequalification process and establishing a list of potential bidders can be done in the same way as in the case of conventional contracts.

6.2.3 Step 3: Tendering and Award of Contract for Works and Services

The following tasks are necessary for the tendering and award of the contract for works and services:

- Preparing and launching Tender Documents
  Details of how to design the tender documents have been included in step 2 above. It is recommended to make extensive use of existing tender documents and contracts for PBC taking into account the specific conditions of the country or region at hand. Since PBCs shift more responsibilities to the contractor than conventional contracts, the contractors have to make more investigations and need more time to prepare their bid. Depending on the complexity of the contract, 3 to 6 months seem to be sufficient, but could require up to 9 months in some cases.

- Organizing pre-bid seminar for prequalified bidders
  The pre-bid workshop would enable the bidders to fully understand the tender document, the risks involved and to prepare a realistic price offer. A 3 to 5-day pre-bid workshop is recommended to present and discuss in detail the initial road condition survey, detailed engineering surveys, traffic surveys, materials surveys, preliminary cost estimates as well as the tender documents, especially all issues that differ from conventional contracts. It should be made clear that a road condition survey, detailed engineering surveys, traffic surveys, materials surveys, and preliminary cost estimates are indicative only and that the contractors will have to make their own investigations.

- Answering queries / issuing addenda
  Answering queries / issuing addenda, carrying out bid evaluation, and awarding the contract does not differ from conventional contracts. Nevertheless, it is recommended to take into account the technical and the financial offer for evaluation purposes and weigh them accordingly. Especially for a pilot PBC the technical offer shall have at least a 50% weight factor.

6.2.4 Step 4: Tendering and Award of Contract for Contract Supervision

If it has been decided to employ a consultant for the contract supervision, a tendering procedure is required. The following tasks are necessary for the tendering for the supervision of contract:
MODULE 12 ROAD INFRASTRUCTURE

- Preparing the Terms of Reference for the contract supervision

Contract supervision of PBCs concentrates more on controlling the service levels rather than checking quantities of work. Nevertheless, the Terms of Reference for PBCs do not differ much from conventional contracts. It is recommended to introduce performance criteria for supervision consultants as well. These should include criteria with regard to the timely submission of reports, verification of testing results (materials and compaction data), application of payment reductions and penalties and possible other tasks defined in the consultancy contract. Penalties shall be defined for non-compliance with these performance criteria in the same manner that they are foreseen in the PBC. Existing TOR for the supervision of PBC may be used as guideline (see Resource Guide for PBC of the WB).

- Select and hire supervision consultants

A one day pre-bid workshop is recommended for contract supervision consultants as well, familiarizing them with the concept of PBC and the tasks the supervision consultant will have to undertake in a PBC.

6.2.5 Step 5: Implementation

For countries that have no or little experiences with PBCs it is recommended to employ a coaching and training consultant, except for simple road routine maintenance PBCs.

The following tasks are necessary for hiring a coaching and training consultant:

- Preparing Terms of Reference for a coaching and training consultant.

The coaching and training consultant shall help all parties involved to adequately play their role, through regular coaching, training and promoting dialogue and exchange of information. As part of his task the consultant shall prepare a supervision manual. Performance criteria should also be introduced for the coaching and training consultant. It should be considered that the consultant who is responsible for project design should be responsible for coaching and training as well. Existing TOR for the supervision of PBC may be used as guideline (see Resource Guide for PBC of the WB).

- Selecting and hiring a coaching and training consultant.

It is recommended to employ coaching and training consultants with extensive experiences in design and supervision or implementation of PBCs as well as supervision, coaching and training of road agencies in developing countries.

6.2.6 Step 6: Monitoring and Evaluation

Monitoring and evaluation pilot PBCs is important not only to make sure that the contractors and consultants are performing in accordance with the contract but to learn from the implementation experiences. To give the necessary weight to this task, it is recommended to establish a monitoring and evaluation unit within the client’s organization exclusively for PBCs. Coaching and training of the staff of this unit should be undertaken by the coaching and training consultant as well.

In addition, road users shall be encouraged to assist in monitoring road conditions by putting up billboards with the telephone number to call for any complaints.
7 Documents available on the internet

There is a great number of documents available on the internet, which may be consulted such as:

*Performance Based Road Maintenance Contracts (PBC) Guideline, Edition 1.1, JICA, February 2016.*

This document also provides guideline on how to implement PBCs on unpaved and paved roads based on the experiences of Kenya.


This document provides also guidelines of how to implement PBCs on paved roads covering some additional subjects which are not covered by the previous document. The guideline is especially useful for countries that have not started to implement PBC since it covers issues like the assessment of the capacity of the road agencies, the contractors and the consultants to undertake PBCs and defines measures how to mitigate the problems. It also discusses the criteria for the selection of pilot sites and other important issues for the implementation of PBCs.

*Sample Bidding Documents, Procurement of Works and Services under Output- and Performance-based Road Contracts and Sample Specifications, the World Bank October 2009 revision.*

This document has been used as basis for almost all PBC in Africa and it is recommended to be used for complex contracts which include improvement and/or rehabilitation works. For simple routine maintenance PBCs local road maintenance contracts may be used and adapted to cover PBCs. Bidding Documents and Prequalification Document for Pilot Projects for Performance-based Management and Maintenance of Roads of Tanzania and other countries are available through: http://www-esd.worldbank.org/pcb_resource_guide/BiddingDocs.htm

*Design and Procurement of long-term pilot contracts for the Performance-based Management and Maintenance of Roads,* The World Bank (World Bank no date 2). This document may be used as a basis to develop own TORs for the design and procurement of PBCs.

*Terms of Reference for consulting services - Facilitation and Training during the Pilot Program for Performance-based Management and Maintenance of Roads, The World Bank* (World Bank no date 2). Since the facilitation and training is an essential factor in the success of PBCs it is recommended to employ consultants and use these TORs as basis to develop own TOR.
8 Reference Documents


Guericke, B. et al. (2014 A) Review of Performance Based Contracting in the Road Sector – Phase 1. TP-42A, World Bank, March 2014. https://openknowledge.worldbank.org/bitstream/handle/10986/18648/878260NWP0TP4200Box377314B00PUBLIC0.pdf?sequence=1


# MODULE 12 ROAD INFRASTRUCTURE

## Module 12.2 Second Generation Road Funds

By Stephan Vincent

**Table of Contents**

1. Executive summary 3
2. Introduction 4
3. The road maintenance problem, and its effect on regional corridors 4
4. The “second generation” Road Maintenance Fund solution 6
   4.1 Principles 6
      4.1.1 The “fee-for-service” principle 6
      4.1.2 Road user charges (RUC) 6
      4.1.3 Road stakeholder involvement 8
      4.1.4 Determining what is included in road maintenance expenditure 8
      4.1.5 The Road Maintenance Fund account 9
   4.2 Design considerations 9
      4.2.1 The financial environment 9
      4.2.2 Legislation 10
      4.2.3 Loss of revenue 11
      4.2.4 Efficient use of funds 11
      4.2.5 Possible separation of funding for maintenance of regional corridors 12
   4.3 Reviews of progress with second generation Road Funds 12
4. Lessons learned and potential for further improvement and innovation 14
   5.1 Analysis of reviews of progress with road funds 14
   5.2 Recommendations for improvement 15
   5.3 Opportunities for further innovation 16
4. Road maintenance policy requirements for regional corridors 17
   6.1 Assessment of road maintenance costs 17
   6.2 Determination of appropriate road user charges 17
   6.3 Establish a Road Maintenance Fund policy for regional corridors 18
   6.4 Monitoring progress 18
4. Institutional issues – Recommendations for Regional Corridors 18
   7.1 National requirements 18
      7.1.1 Road Maintenance Fund structure 18
      7.1.2 Establishing appropriate road user charges 19
      7.1.3 Regulation and monitoring 19
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2 Role of the Corridor Management Institutions (CMIs)</td>
<td>20</td>
</tr>
<tr>
<td>7.3 Role of the Regional Economic Communities (RECs)</td>
<td>20</td>
</tr>
<tr>
<td>7.4 Role of the African Union</td>
<td>21</td>
</tr>
<tr>
<td>8 Glossary of terms</td>
<td>22</td>
</tr>
<tr>
<td>9 References</td>
<td>26</td>
</tr>
<tr>
<td>10 Annex</td>
<td>27</td>
</tr>
<tr>
<td>10.1 Annex A – Country activities checklist for regional corridors</td>
<td>27</td>
</tr>
<tr>
<td>10.2 Annex B – Corridor Management Institution (CMI) activities checklist</td>
<td>29</td>
</tr>
<tr>
<td>10.3 Annex C – Regional Economic Community (REC) coordination checklist</td>
<td>30</td>
</tr>
<tr>
<td>10.4 Annex D – African Union activities</td>
<td>31</td>
</tr>
</tbody>
</table>
1 Executive summary

The economic benefits from ensuring the effective maintenance of roads have been well understood for many years. It has been shown that reconstruction costs, if a road falls into serious disrepair, are at least three times as great as the cost of proper road maintenance. In addition, vehicle operators have lower costs for fuel and other expenses if roads are in good condition, and reduced travel times allow more trips to be made per week or per month, contributing to greater profits for private sector organisations.

Since the 1990s, wherever difficulties have been encountered in providing the funding for effective road maintenance, the solution generally applied in African countries has been to establish a “second generation” Road Maintenance Fund, based on the “fee-for-service” principle that the users of roads should pay for the service of providing the roads, with road user charges calculated to provide the revenue needed to maintain these roads.

However, international reviews of progress with second generation Road Maintenance Funds have raised a number of concerns. In many countries, monitoring and evaluation of how effective these initiatives have been in improving road maintenance has been inadequate. Road Fund Boards set up to provide oversight have generally been less successful than had been hoped, and the original intention of giving road stakeholders a significant role in ensuring that value for money is achieved in the operation of each road fund has rarely been achieved.

For the roads that form the regional corridors, there is potential for the Regional Economic Communities (RECs) and Corridor Management Institutions (CMIs) to provide additional oversight of road maintenance of the sections of each corridor that pass through each country. With an Africa wide policy of providing effective road maintenance of regional corridors through second generation Road Maintenance Fund fee-for-service principles, the RECs can monitor the implementation of this policy; and the CMIs can provide predictions of anticipated traffic and facilitate road stakeholder feedback from transport operators.

Where effective road maintenance of a regional corridor is not being achieved, three possible options are available: (i) set up a dedicated second generation Road Maintenance Fund for only the regional corridor in that country; or (ii) if a Road Fund already exists in that country, account separately for road user charges and road maintenance expenditure for the regional corridor; or (iii) consider private sector solutions, such as a toll road or road concession for the regional corridor within that country.

Comprehensive data for each regional corridor for road user charges; road maintenance activities; traffic; and road condition should regularly be sent to the relevant REC, so that the REC can establish whether effective road maintenance is being achieved.
2 Introduction

The purpose of this Guideline is to provide guidance to Regional Economic Communities (RECs) and Corridor Management Institutions (CMIs) on the application of “second generation” Road Funds by member countries to improve the maintenance of regional road corridors.

The scope of this Guideline is therefore only to consider the maintenance of existing roads that form part of the regional corridors, and how actions at national level, and by RECs and CMIs, can achieve improved road maintenance.

The focus of this Guideline is on ensuring reliable, sustainable funding for all necessary road maintenance activities. Methods of prioritising and executing road maintenance are only considered from the viewpoint of achieving the best possible value for money from this funding.

Section 3 considers how the understanding of “the road maintenance problem” has evolved over the last 30 years, and its impact on the regional corridors. Section 4 describes how the “second generation” Road Maintenance Fund solution was developed to address this problem, and Section 5 summarises the lessons learned from the implementation of existing Road Funds.

Section 6 explains the road maintenance policy requirements needed to achieve further improvements in the maintenance of regional corridors, and Section 7 gives recommendations to address the institutional issues identified.

3 The road maintenance problem, and its effect on regional corridors

During the late 1970s and the 1980s it became clear that many countries were facing difficulties in properly maintaining their road networks. Due to inadequate funding of road maintenance, capital investment in new roads was being eroded as roads deteriorated much more rapidly than anticipated. The extent of the problem was highlighted in the paper “Road Deterioration in Developing Countries: Causes and Remedies”, published by the World Bank in 1988, bringing together the results of an extensive series of international studies, and applying economic analysis principles and that became the basis for the development of current road expenditure prioritisation methods.

The Highway Design and Maintenance Standards Model (HDM-III), based on the results of studies in the 1970s and 1980s, quantified vehicle operating costs (VOCs), and applied road deterioration models considering many factors including traffic levels and vehicle loads, to predict the condition of a road under different road maintenance regimes. It then became possible to carry out economic analysis to both calculate the economic benefit of improving a road, and to predict the cost of the road maintenance needed to sustain this benefit.

Two important findings from the studies in the 1980’s have become central principles in the economic case for increasing expenditure on road maintenance:

(i) It is at least three times more cost effective to maintain a road properly, rather than allowing a road to deteriorate until much more expensive reconstruction is needed.
(ii) Transport costs increase very considerably as roads deteriorate. In addition to higher reconstruction costs, it may also be costing road users as much as two or three times as much in extra fuel and other additional costs (“vehicle operating costs” or “road user effects”) as proper maintenance of the road would have cost.

In 2000, HDM-III was superseded by the Highway Development and Management model (HDM-4). Amongst other refinements, HDM-4 considered a wider range of road user effects (RUE) rather than only vehicle operating costs. For example, if, because of road deterioration, a vehicle can only travel at half the speed that should be possible, the vehicle can only make half as many journeys in a month, reducing the potential profits for a private sector vehicle operator.

The most important factor in maintaining a road is normally drainage, both keeping the side drains and culverts clear, and ensuring that water drains rapidly from the road surface. To achieve proper drainage, it is essential to keep the surface of paved roads sealed against the ingress of water through cracks or potholes, and to maintain the correct camber on gravel roads. If water gets into the structure of the road, the material that the road is built from softens, and the road deteriorates more rapidly. Hence routine maintenance, including clearing drains and patching potholes, often neglected due to a shortage of funds, is critical in reducing road deterioration.

Overloading of vehicles is another significant factor in accelerating road deterioration. In mathematical terms, overloading is often described as having a “fourth power” effect on road deterioration. Hence, doubling the load that a vehicle carries causes \((2 \times 2 \times 2 \times 2) = 16\) times the amount of road deterioration. Overloading by 20% causes twice the amount of deterioration. Despite this knowledge, many countries do not have effective control of vehicle overloading, resulting in roads deteriorating faster than intended.

Inefficiencies in the execution of road maintenance have led many countries to re-organise government road construction and maintenance organisations into more independent road agencies or road authorities. This is intended to separate the role of the roads ministry in deciding what work needs to be done, from the role of the road agency or road authority which is held responsible for the efficient execution of all work in accordance with a performance agreement.

In search of further improvements in value for money in road maintenance, some countries are implementing performance based contracts, where the contractor is paid according to whether the road is in good condition, rather than paid according to the extent of road maintenance work carried out. The objective is to give the contractor an incentive to repair potholes as soon as they appear, keep drains clear, etc, to minimise the need for the more major repairs that would be needed if the road is allowed to deteriorate.

The higher traffic levels on regional corridors make the effects of road deterioration more serious. Every vehicle that is delayed or has higher operating costs as a result of poor road conditions will have unnecessary additional operating costs, reducing the economic benefit of the road.

It is important to note that poor road conditions may not be the only cause of travel delays on regional corridors, and that border posts and check points along each road can also be a serious cause of delay.
To achieve the maximum economic benefit from the regional corridor to transport operators, these other causes of delays also need to be addressed.

4 The “second generation” Road Maintenance Fund solution

In the early 1990s, in response to the need to address the road maintenance problem, consultations took place with road stakeholders in different countries to identify possible solutions. An important conclusion was that vehicle operators and other road stakeholders could understand the benefits of contributing to the cost of improved road maintenance, but did not want to do this through increased taxation since there was no guarantee that the extra revenue would actually be spent on road maintenance. Road stakeholders also wanted to see roads maintained on a more commercial basis, applying methods normally used in the private sector, so that better value for money was achieved from any additional contributions made.

This led to the development of the “second generation” Road Maintenance Fund solution, which has formed the basis of the implementation of Road Funds in over 30 countries in Africa.

4.1 Principles

4.1.1 The “fee-for-service” principle

At the centre of the second generation Road Maintenance Fund solution is the “fee-for-service” principle. If roads are considered to be providing a service, in a similar way to how utility companies provide electricity and water, then road users should pay an appropriate fee for this service. Since this is a fee for a specific service, this should not be considered as taxation, and this should not be part of the government budget.

The intention was that a fund should be created that is dedicated solely for road maintenance, hence it is described here as a Road Maintenance Fund. All new road construction and road improvements should be paid from other sources, either through the government budget; or through development partner funding; or more recently through other sources such as Public-Private Partnerships (PPPs). If possible, the Road Maintenance Fund should fund all road maintenance, although this is easier to achieve for regional and national roads; urban and rural roads might only receive partial funding or no funding at all.

The application of the fee-for-service principle to road maintenance through a road fund is often described as the “commercialisation” of the road sector, also involving delivering as much road maintenance as possible through competitive contracts and applying management methods more associated with the private sector than with government.

4.1.2 Road user charges (RUC)

Road user charges (RUC) should be determined to achieve appropriate contributions based on the extent of usage of the roads. Payments should be designed to balance payments fairly between different types of road users, and to take into account that heavy trucks cause most of the deterioration
of road pavements. The total funding raised through road user charges should also match road maintenance needs.

Potential types of road user charges are listed in Box 1. According to the fee-for-service principle, the charges made should be related as closely as possible to a combination of the extent of use made of the roads and the extent of deterioration of the roads caused.

A levy on fuel is the most widely used road user charge, since this should relate directly to the extent of use of the road network, and this can be collected at source from fuel suppliers based on total fuel imports (or total fuel production if produced in country). The fuel levy may also be higher on diesel, to reflect the use of diesel by heavier vehicles. There will be arguments that fuel for non-road uses, such as for power generation, agriculture, railway and maritime use should be exempted from this levy. If any exemption is applied, great care must be taken to avoid misuse of this privilege; in the interests of keeping the system straightforward it may be in the national interest to accept this anomaly as unavoidable unless good governance can be guaranteed.

<table>
<thead>
<tr>
<th>Box 1: Potential types of Road User Charges (RUCs)</th>
</tr>
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<tbody>
<tr>
<td>1. Levies on consumables:</td>
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<tr>
<td>- fuel and lubricants</td>
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<tr>
<td>- tyres</td>
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<tr>
<td>- vehicle spare parts</td>
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<tr>
<td>2. Charges on vehicle ownership:</td>
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<tr>
<td>- levy on vehicle at time of import/purchase</td>
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<tr>
<td>- annual fees for vehicle ownership</td>
</tr>
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<td>3. Fees paid by licensed drivers:</td>
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<tr>
<td>- at award of driving licence</td>
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<tr>
<td>- annual driving licence fee</td>
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<tr>
<td>4. Fees related to a combination of vehicle weight and use of roads</td>
</tr>
<tr>
<td>5. Transit fees for foreign vehicles</td>
</tr>
<tr>
<td>6. Road and bridge tolls</td>
</tr>
<tr>
<td>7. Fines for overloading and other traffic offences (not recommended)</td>
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</table>

Fees related to a combination of vehicle weight and use of roads are the most accurate application of the fee-for-service principle, but will require the application of new technologies in the future. In this case, fees are directly related to the axle weight that a particular vehicle can apply to the road when fully loaded, and then applied according to the distance actually travelled along the road network. This is likely to become more widely applied in the future, potentially using the same satellite position tracking technology that many truck operators already use to track the current position of each of their vehicles.

For the regional corridors, transit fees are likely to be the most appropriate road user charges when trucks are passing through other countries, together with other charges for use of the road network in the home country. Road and bridge tolls could also be appropriate for regional corridors. Truck operators will try to purchase fuel in whichever country fuel is cheapest along a corridor, so a fuel levy may not be a reliable mechanism for collecting road user charges in a particular country.
Fines for overloading and other traffic offences are not recommended as a source of income for a Road Maintenance Fund. The objective should be to achieve effective enforcement of vehicle loading and other traffic rules, hence there should not be a significant income from this source. The proper collection of fines is also very difficult to guarantee.

Whatever combination of sources of revenue is selected, what is important is that the total revenue collected each year should match the anticipated funding required for road maintenance needs. An effective mechanism is needed for adjusting road user charges each year to ensure that sufficient revenue is collected.

4.1.3 Road stakeholder involvement

Workshops held in Africa during the development of the concept of the second generation Road Maintenance Fund highlighted that many road stakeholders did not fully trust politicians to ensure that road user charges collected for road maintenance would necessarily be spent on road maintenance. The requirement for a Road Fund Board therefore evolved, to oversee the correct implementation of the Road Fund. Over half of the members of the Road Fund Board were intended to come from the private sector, to represent the interests of road stakeholders, and the Chairman of the Board should also preferably be from the private sector. In practice, many Road Fund Boards did not achieve this level of independence, and many are dominated by government representatives, resulting in only limited success in this element of the original design intentions.

The main reason for creating a Road Maintenance Fund is to solve a financing problem, and governance issues may need to be addressed by other means. If the wrong methods of road maintenance are being applied, or priorities are incorrect, this is not a financing problem. The focus of activities of the secretariat or administration of the Road Maintenance Fund needs to be to ensure that all of the revenue that is intended to be collected is deposited in the fund, and that all expenditure occurs in accordance with established rules and procedures.

A high level of transparency must be achieved in providing information to the public about the revenue collected and expenditure made, and in explaining the rules applied and procedures followed when payments are made from the fund.

It is also essential that there is an effective mechanism for road stakeholder feedback, either through a Road Maintenance Fund Board or by other means, so that road users can express their opinions and require a response if they feel that the funding for road maintenance is not being spent as effectively as it should be.

4.1.4 Determining what is included in road maintenance expenditure

What is regarded as road maintenance, and hence what can be funded by the Road Maintenance Fund must be clearly defined. For instance, if road maintenance is defined as all actions needed to preserve existing road assets, but not to carry out improvements, then maintenance may include not only routine maintenance (clearing drains, filling potholes & cracks in paved roads, grading gravel roads to maintain camber, maintaining road signs, etc); and periodic maintenance (overlays to paved roads, re-
gravelling the surface of gravel roads); but also road rehabilitation involving more significant work if this is part of preserving the road asset.

The roads for which road maintenance is to be funded must also be defined. Each country will have its own road classification system, dividing roads into at least regional corridors, national main routes, urban roads and rural roads. There may be several other classifications or sub-classifications of the road network. It is possible that a Road Maintenance Fund might only fund the maintenance of all regional and national roads. However, if the main source of revenue is from a fuel levy, it might be argued that the Road Maintenance Fund should also be contributing to part of the maintenance of urban and rural roads, in which case a formula is normally developed to determine how a limited amount of funding should be distributed between different urban authorities and rural areas.

For the purposes of this Guideline, the main interest is the component of road maintenance funding for regional corridors.

4.1.5 The Road Maintenance Fund account

For the effective operation of a Road Maintenance Fund, the fund itself should be held in a separate bank account, if possible in a commercial bank account independent of the finance ministry. This will keep the revenue and expenditure of the fund completely independent of other government expenditure, in accordance with the fee-for-service principle.

As far as possible, revenue should be deposited directly into the Road Maintenance Fund account, for instance with payments made directly from fuel suppliers without going through a government account. Whenever possible, payments to road maintenance contractors should also be made directly from the Road Maintenance Fund account, to avoid delays caused by additional processes involved in applying government payment systems.

An important reason for using a commercial bank account, if this is possible, is to ensure that any revenue collected in one financial year that is not spent at the end of that financial year is “rolled over” into the next financial year. With government accounts, any unspent funds are normally not retained at the end of the financial year.

An independent audit of the Road Maintenance Fund should take place every year.

4.2 Design considerations

4.2.1 The financial environment

One of the first considerations when considering setting up or modifying the operation of a road fund is to understand what is possible under the country’s constitution, and whether the country’s Finance Act or other existing legislation restricts what is possible. There may be restrictions on what road user charges can be collected and which organisations can collect them. There may also be constraints requiring funding to be held in a government account, or other restrictions. If a Road Maintenance Fund is implemented on a true fee-for-service basis, where all revenue is directly from road use related charges, and all expenditure is only for road maintenance, it may be possible to minimise the effect of
such restrictions. If a Road Fund is partially funded through the government budget it may become subject to more complex government expenditure requirements.

The International Monetary Fund (IMF) has indicated some concerns about the implementation of road funds in the past, especially “first generation” Road Funds where government funds are allocated for expenditure on the road network but without adequate controls or oversight of how this money is actually spent. Soon after the initial development of the second generation Road Maintenance Fund concept, the IMF provided guidance on when a road fund solution might be appropriate, and recommended that the situation in each country should be considered on a case by case basis. More recently, the IMF has provided further guidance on the operation of all types of extra-budgetary funds, of which a road fund is one example.

In particular, some financial specialists are concerned about a possible reduction in “fiscal flexibility”, which is the need for governments to have freedom to reallocate government expenditure to respond to immediate needs such as natural disasters or urgent development needs. Dedication of any funds to a specific purpose, such as road maintenance, could be seen as “earmarking” or “ring-fencing” funds for a particular purpose, and hence reducing fiscal flexibility. In response to such arguments, it is important to emphasise the significant long term economic return to the country from effective road maintenance, and how the fee-for-service principle, if applied correctly, raises revenue directly related to the service provided and hence is outside the government taxation system.

It is also important that the accounts for a road fund are recorded and published in the same format and to the same annual time schedule as government accounts. This enables the financial figures from the road fund to easily be integrated with figures from government accounts, if this should become necessary as part of carrying out macroeconomic analysis for the country.

### 4.2.2 Legislation

It is generally regarded as essential that a Road Maintenance Fund should be established through an Act of Parliament, in order to provide the legal authority needed to collect road user charges; to establish how the Road Maintenance Fund account will operate; to define what expenditure can be funded; and to establish appropriate administration and oversight of the fund.

As well as establishing the authority to collect specific types of road user charges, the legislation must also specify how such charges can be adjusted to respond to future changes in the funding needed for road maintenance. If possible, adjustment should be made through a procedure that does not require an amendment to the Act.

The legislation should include a constraint on how much of the fund can be used for administrative purposes, including for establishing a secretariat; for collecting and analysing data about the road network; and for paying costs and expenses of any officials.

There should also be provisions to address the situation where expenditure is expected to exceed revenue, such as when a significant amount of more expensive road rehabilitation is required in a particular year. For example, additional revenue might be raised in preceding years and invested in government bonds or other secure government investments.
4.2.3 Loss of revenue

When designing the road user charging mechanism, every effort must be made to guard against the possibility of collecting less revenue than intended. There are a variety of ways in which revenue can be lost. If transit fees or tolls are collected in cash by authorised staff, checks need to be in place to ensure that the revenue collected matches the number and type of vehicles that should have paid. When fuel levies are paid based on the volume of fuel delivered, or if exemption from fuel duty is granted to non-road fuel users, the volume on which the levy or exemption is based needs to be checked carefully.

If the collection of any revenue is implemented through a government agency, for instance for annual vehicle licence fees, the revenue needs to be transferred to the road fund without delay, and it must be possible to check that all of the revenue due is delivered.

It may be difficult to ensure that sufficient work has taken place to make payments to road maintenance contractors as rapidly as planned, for instance if work is not completed on schedule, resulting in a significant positive balance in the road fund account. If the road fund is held in a government account, there is a risk that the road fund account may then be “raided” by the government to finance other urgent government expenditure, with no guarantee that the money will be returned.

4.2.4 Efficient use of funds

Every effort must be made to ensure the most efficient use of the Road Maintenance Fund, through well designed road maintenance standards and methods; effective prioritisation of the best sequence of road maintenance activities; good procurement practices; and efficient execution of road maintenance contracts. Road stakeholders need to be able to observe value for money in road maintenance activities through the transparent publication of data to confirm that the latest good practices are being followed in all activities.

It is therefore essential to have up to date, comprehensive data available about the inventory of road assets, the current condition of those assets, and the current and predicted future levels of traffic on each road. Appropriate prioritisation and monitoring tools are also needed to support good decision making in planning and scheduling road maintenance. These are all components of a comprehensive approach to road asset preservation.

If the necessary data and analysis tools are not already available, it may be appropriate to pay essential data collection and analysis costs from the Road Maintenance Fund. However, careful assessment of the benefits gained from each element of the data collection and analysis is needed to prevent unnecessary additional costs. A “value engineering” approach may be needed to achieve the maximum benefit at the minimum cost. Implementation of a comprehensive Road (Asset) Management System (RMS/RAMS) can involve excessive costs for detailed specialised data collection and sophisticated software systems that are unsustainable and can actually divert limited skilled resources away from more immediate and obvious engineering needs.
4.2.5 Possible separation of funding for maintenance of regional corridors

The focus of this Guideline is on regional corridors, and the question arises of whether it would be appropriate to operate a separate Road Maintenance Fund for only the regional corridors within a country, and even whether a coordinated approach could be taken to the maintenance of a road corridor across several countries.

The main difficulty that arises is that the regional corridors also form an important part of the national road network of each country that each corridor passes through. There is potentially a good case for making special provisions within each country to ensure effective road maintenance of the regional corridors, but these roads are still part of the national road infrastructure.

If any special arrangement was to be made for the regional corridors, in view of the higher traffic levels on these roads, a road concession model might be more appropriate than trying to implement a selective second generation Road Maintenance Fund. The concessionaire could then be empowered to raise tolls directly from road users to fund road maintenance. Measures would also be needed to ensure that overloading was controlled within the concession lengths of road. An advantage of a private sector concession would be that the concessionaire could also then raise private sector finance against future road toll income, to finance road improvements. Similar concessions might then operate in adjacent countries.

With the normal national second generation Road Maintenance Fund approach, though, it is still quite possible that regional corridors can be given priority in achieving effective road maintenance.

It would be good practice to assemble road maintenance performance data specific to each section of each regional corridor and send it to the relevant REC in order that the REC can review how effectively road maintenance is being carried out.

4.3 Reviews of progress with second generation Road Funds

The African Road Maintenance Funds Association (ARMFA) was formed in 2003. The regular exchange of knowledge between different road funds in Africa through ARMFA’s annual and regional meetings highlights how well established the road fund concept is in Africa.

One of the tools initially used to assess progress with the implementation of road funds was the Road Maintenance Initiative (RMI) Matrix. This table included a series of columns for “Road Funds”, with details of progress for 23 African countries. However, this matrix concentrated mainly on implementation aspects of the road fund; including whether there was a Road Fund Board with a private sector majority, whether the fund was intended to fund all road maintenance needs, and whether road user charges were deposited directly into the road fund account; rather than how effective each road fund was in improving road maintenance. Many road funds were established in Africa between 1996 and 2001.

Several independent international studies have been carried out that include assessment of what evidence there is that second generation Road Funds have been as effective as had been hoped in improving road maintenance, including comments on different aspects of the original design concept.
One of the most comprehensive assessments of progress, across most second generation Road Fund initiatives at that time, was the World Bank Independent Evaluation Group (IEG) Evaluation of Bank Support for Road Funds, which was carried out in 2007. Some extracts from the conclusions of this report are included in Box 2 below.

**Box 2: World Bank Independent Evaluation Group (IEG), evaluation of bank support for Road Funds (2007), prepared by Hernan Levy and Peter Freeman**

Extract from IEG report conclusions:

8.6 Monitoring and Evaluation. One of the weakest areas of road funds relative to expectations is the lack of adequate monitoring and evaluation systems. Information on changes in the condition of the road network is sparse, and what is available is often unreliable. While Monitoring and evaluation is a responsibility of the road agency rather than of the road fund, establishment of a fund was expected to result in a better monitoring system. A fund was supposed to have the interest and leverage necessary to demand from the road agency the establishment of adequate monitoring. Overall, the Boards lack basic indicators to judge the performance of the road agency they provide funds to. Better monitoring should be a key area for improvement. Improved monitoring also would permit more frequent empirical assessment of the road funds.

8.7 Conditions for success. Road funds appear to work and be effective under some conditions, but not under others. Some conditions appear quite specific to the country’s economic and political circumstances. As in other areas of public sector management, government commitment is essential for establishing an efficient road fund, including adequate level of resources, and a secure system for channeling revenues to the fund. More specifics of conditions for success will need to await a larger assessment of individual road funds, and a systemic identification of the conditions that led to the successful funds.

8.8 Outcomes. On the main outcome, condition of the road network, data are so sketchy that is not possible to ascertain whether there has been real progress when all the road funds reviewed are considered.

Another useful study was an international assessment, published in 2011, of what progress had been made in applying the principles that were originally put forward in the 1988 policy paper “Road Deterioration in Developing Countries”. This assessment was carried out by some of the original authors of the 1988 paper. Box 3 below includes some extracts from this report about difficulties encountered in achieving the original design objectives.

**Box 3: Maintaining Road Assets (2011) - A fresh look at the World Bank's 1988 Policy Paper "Road Deterioration in Developing Countries", prepared by Clell Harral, Graham Smith and William Paterson**

From the Executive Summary:
“…Performance monitoring has been demonstrated to be of central importance to support accountability and provide feedback for the next investment cycle. However, few countries do it well. This suggests that many road administrations are still seeking to avoid accountability: they do not want their performance
Another study, published in March 2016, “Enhancing Road Maintenance in OIC (Organisation of Islamic Cooperation) Member States”, includes a more recent assessment of progress with road funds in 20 OIC Member States. This report was prepared by the International Road Federation, for the Standing Committee for Economic and Commercial Cooperation of the Organisation of Islamic Cooperation (COMCEC). The section in this report on the organisation of road maintenance again highlights difficulties in ensuring the independence and autonomy of Road Fund Boards; that often only limited participation of road stakeholders is actually achieved; and that poor monitoring and evaluation of road funds is generally observed.

5 Lessons learned and potential for further improvement and innovation

5.1 Analysis of reviews of progress with road funds

Although the second generation Road Maintenance Fund solution is currently recommended by many road sector specialists, and is generally accepted by international organisations supporting improvements in the road sector as a good solution for improving road maintenance, several experienced independent observers have identified concerns about how well this solution is actually working in practice in many countries.

One fundamental observation is that if a government, at the highest level, wishes a Road Maintenance Fund to be successful, any deficiencies will be overcome, and the road fund will normally achieve its objectives. Conversely, by implication, if there is not such high level support, then interference in the operation of the road fund, for instance through control of the Road Fund Board through members of the Board nominated by government, or by private sector members of the Board failing to properly represent road stakeholders, can result in serious shortcomings.

Further, there is a widely observed failure to implement effective monitoring and evaluation of the effectiveness of many Road Maintenance Funds in achieving improvements in road maintenance. Another observed deficiency is a lack of transparency in the activities of Road Maintenance Funds, failing to place adequate information about the activities of the road fund in the public domain.
In addition, basic failings have been observed in how the intended principles upon which Road Maintenance Funds were designed are actually implemented. For example, some road funds contribute to improvement and development of the road network, rather than only maintenance.

The main positive effect that is widely observed is that the implementation of a second generation Road Fund does normally increase the funding available for road maintenance; which is the primary objective of setting up such a road fund. What is less clear is whether the Road Fund Board structure that has been used in most countries is as effective as intended in applying this additional funding to achieve improved road maintenance. There is also significant doubt about whether many Road Fund Boards actually provide sufficient effective feedback of road stakeholder opinions and priorities.

The limited effectiveness of a Road Fund Board in providing oversight is further illustrated by the widely observed failure to implement effective monitoring and evaluation of the impact of many road funds, and the lack of perceived transparency in the operation of many road funds.

There are some effective and successful second generation Road Maintenance Funds. But simply following a standard, fixed structure of implementation does not guarantee success.

5.2 Recommendations for improvement

The basic principle of funding road maintenance from road user charges determined on the fee-for-service principle, which has always been central to the design of second generation Road Maintenance Funds, seems as applicable today as it was when this principle was initially applied in the first “second generation” Road Funds implemented in the 1990s. The applicability of this principle does not appear to have been questioned.

A change of emphasis seems to be needed, though, in how Road Maintenance Funds are implemented and operated in the future. Central to any future implementation or refinement must be effective regulation and monitoring of the road fund. Regulation must implement an effective monitoring framework, which concentrates on evaluating how effective the road fund is in achieving both improved road maintenance and value for money. Regulation should also impose a requirement for transparency in all activities of the road fund, with all relevant information placed in the public domain.

A Road Maintenance Fund must focus only on road maintenance, for effective application of the fee-for-service principle. The full funding of road maintenance is also essential, unless additional guaranteed funding to achieve full funding is available from another source. The high economic benefits of effective road maintenance are well understood by roads engineers. If such benefits are not understood by road stakeholders, then additional effort is needed to engage road stakeholders in the process of deciding how much should be spent on road maintenance and where that money will come from. There must also be a clear and transparent decision about whether road rehabilitation, as part of the cost of preserving an existing road asset, should be paid from the road fund; and if road rehabilitation is to be paid for then sufficient funding to pay for this must be raised through road user charges.
If a Road Fund Board is ineffective, an alternative regulation, monitoring and management structure should be considered. A Road Fund Board that is dominated by government officials and that merely puts into effect the wishes of controlling politicians serves no practical purpose.

For the regional corridors, independent monitoring of the effectiveness of road maintenance activities is possible through the RECs. If a policy is implemented of providing comprehensive monitoring data from each country along each regional corridor to the relevant RECs, the RECs can both place all of this data in the public domain for the benefit of all road stakeholders, and analyse the data to verify whether sufficient funds are being made available for road maintenance, and whether the level of road maintenance that is needed is being achieved.

The RECs can also exchange data and analysis results between each other to compare performance between different countries, and disseminate examples of good practice in the maintenance of regional corridors to member countries.

5.3 Opportunities for further innovation

An important aspect of successful second generation Road Funds, for instance in New Zealand, has been a continuous process of locally driven refinement and improvement, rather than implementing a fixed road fund solution and then never making any changes. A successful road fund structure must include a specific responsibility to identify and implement refinements and improvements.

New technologies offer many opportunities that are likely to be relevant to the refinement of Road Maintenance Funds. Of particular importance are opportunities to improve transparency by publishing information online, which can be combined with online education and analysis tools to allow road stakeholders to analyse the data provided and make comparisons with equivalent data from other countries.

For road user charges, in the future it may be possible to implement a system through which charges can be related to the actual distance travelled along the road by each vehicle, using a GPS tracking system similar to the systems already used by many vehicle operators to track the locations of their vehicles. This could be particularly relevant for achieving fair contributions from the operators of heavy vehicles.

GPS devices, or smartphones equipped with GPS, can also be used for measuring travel times between towns along regional corridors. Additional processing of the detailed position data might be able to separate border crossing delays and time spent at checkpoints, allowing average travel speeds to be calculated, which are an alternative indicator of average road condition.

With appropriate processing software, the accelerometer in a smartphone can also be used to make an approximate measurement of how uneven the road surface is, giving an alternative approximate measurement of road condition. This alternative road condition data might be collected by vehicle operators, either as an independent verification of official road condition data, or as an alternative source of data if official data is not available.
Payments through mobile phone systems are widely used in Africa, and might be used as an alternative method of paying tolls or transit fees. In Europe, some road toll systems allow payments to be made online and then cross referenced to a system that automatically recognises the number plate of each vehicle as it passes the toll both, so that vehicles do not need to stop at toll booths at all. If the toll is not paid, the owner of the vehicle is automatically charged a penalty, using data from the national vehicle licensing database to identify the owner.

6 Road maintenance policy requirements for regional corridors

Each country that a regional corridor passes through should take the following actions to establish effective road maintenance of the regional corridor.

6.1 Assessment of road maintenance costs

The first essential policy requirement is for each country to prepare, and to keep updated, an accurate assessment of road maintenance requirements, and associated costs, for each of the next ten years, specific to each section of each regional corridor passing through the country.

The optimum road maintenance scenario should be presented, based on the current design standard and condition of the road. The anticipated condition of each section of road under this maintenance regime for each year for the next ten years should also be presented.

Where road improvements are already scheduled, with guaranteed finance, the maintenance regime should be changed to suit the improved road from the date that the improvement is currently expected to be completed.

Where full funding of the optimum road maintenance scenario cannot be guaranteed, an additional current expectation scenario should also be prepared, with the best prediction available for anticipated road maintenance activities, anticipated expenditure, and anticipated road condition, for each section of each regional corridor for each of the next ten years.

6.2 Determination of appropriate road user charges

Based on current classified traffic counts, or the best estimates of traffic available, and predicted traffic counts for the next ten years; and taking into account the division of this traffic between transit traffic from other countries and national traffic; a recommendation should be proposed for how the funding required for the optimum road maintenance scenario could be raised through an appropriate combination of road user charges.

The analysis to prepare this recommendation should be based on the methods and analysis tools developed for the implementation of second generation Road Maintenance Funds, which take into account the greater deterioration caused by more heavily loaded vehicles; but adapted to any known constraints of which road user charges are most likely to be collected in that country. The RONET spreadsheet model is an example of such a model; the Road User Revenues Module of RONET estimates the level of road user charges required to meet road maintenance expenditures.
The objective of this analysis is to establish what road user charges would need to be applied to achieve full funding of road maintenance of the regional corridors if a second generation Road Maintenance Fund was to exist for only the road sections that form part of the regional corridors. This analysis is required whether or not a Road Fund already exists in that country.

6.3 Establish a Road Maintenance Fund policy for regional corridors

Develop and implement a policy to ensure full maintenance of all sections of regional corridors within the country, based upon second generation Road Maintenance Fund, fee-for-service, principles.

This policy will be unique to the actual financing and political environment in each country.

If a Road Fund already exists, the policy could be to give appropriate priority to maintenance of each section of each regional corridor, and at the same time to ensure that appropriate corresponding road user charges are collected from all of the vehicles using each section of the regional corridor to provide the funding needed.

If this is not possible within an existing Road Fund, either because the structure of an existing Road Fund cannot be adapted to do this, or because there is no such fund, the possibility of setting up a second generation Road Maintenance Fund dedicated to the maintenance of one or more regional corridors should be considered.

The alternative of implementing a toll road to finance road maintenance, or a road concession with tolls, might also be considered.

6.4 Monitoring progress

Whichever solution is selected, the policy must include the implementation of regular progress monitoring, sending updated data on actual and predicted costs, actual and predicted road user charges, the latest data on traffic counts and predictions, and actual and predicted road condition from each country to the relevant REC at quarterly intervals.

7 Institutional issues – Recommendations for Regional Corridors

7.1 National requirements

A checklist with additional details of country level activities is included in Annex A.

7.1.1 Road Maintenance Fund structure

If adequate maintenance of regional corridors is not already taking place, an institutional structure must be implemented that will address this issue and ensure that appropriate road maintenance will take place in the future.

For each country, if there is a problem, three options are possible:

(i) Establish a new regional corridors Road Maintenance Fund, dedicated only to the maintenance of regional corridors, and established in accordance with second generation
Road Fund fee-for-service principles to ensure appropriate road maintenance of the regional corridors.

(ii) If a Road Fund already exists in the country, adapt the structure and organisation of this Road Fund to account for the funding for the regional corridors separately from the funding for the rest of the road network, and ensure that sufficient revenue is allocated to the maintenance of the regional corridors to enable appropriate road maintenance to take place.

(iii) Work with the private sector to implement a toll road or road concession arrangement for regional corridors, where a private sector organisation can collect tolls but is then also made responsible for ensuring appropriate road maintenance.

7.1.2 Establishing appropriate road user charges

In each country that each road corridor passes through, the roads ministry should ensure that an analysis model exists that can assess the contribution that road users should be making to the maintenance of regional corridors.

Using predictions of the cost of road maintenance in the current and future years, the analysis model should aim to achieve a fair distribution of road user charges between different road users, taking into account that heavier vehicles cause more significant road deterioration. Cost modelling should be carried out for several years, so that any higher costs of road maintenance in an individual year can be distributed over several years to achieve more constant road user costs. The analysis should also take into account any anticipated increase in the traffic using each regional corridor in future years.

When establishing appropriate road user charges, the methods of collecting these charges should also be considered carefully, to ensure that the legal authority will exist to collect such charges, and that the charges can be collected and deposited into the road fund account reliably and at reasonable collection cost.

7.1.3 Regulation and monitoring

In each country that each road corridor passes through, the roads ministry should ensure that an appropriate regulatory environment exists that defines the rules that should be followed by all parties involved in the maintenance of the regional corridors, and that a monitoring regime is established to confirm that these rules are being followed.

The main elements of the regulatory environment for a second generation Road Fund are normally established through an Act of Parliament. The roads ministry is likely to have additional regulatory functions, including defining the details of specific Regulations required by the Act, preparing additional guidance documents, and in many cases also establishing specific performance agreements.

The monitoring environment should be designed to confirm that each aspect of the regulation system established at national level is being followed correctly, with a requirement to bring to the attention of the relevant action party any concerns that are identified.
In addition to national monitoring requirements, the national monitoring system should also be designed to ensure that sufficient monitoring information is also provided to relevant RECs and CMIs to confirm that regional policy requirements are being addressed.

### 7.2 Role of the Corridor Management Institutions (CMIs)

The Corridor Management Institutions (CMIs) have specific responsibilities associated with the monitoring and improvement of each regional corridor. As a result of this monitoring role, the CMIs should already have data about the existing traffic along each section of each regional corridor, and predictions for future traffic, which will be useful to each country along the corridor both for predicting road deterioration and for assessing appropriate road user charges.

The CMIs also work closely with the transport operators using the corridors, and hence can assist in collecting feedback from road stakeholders about the condition of each section of the corridor and priorities for road maintenance. Information about travel times along each section of each corridor is also likely to be collected by the CMIs; and if delays caused by border crossings, check points, and any other causes not related to road condition can be separated from the time spent driving along the road, the average travel speed along each section can provide additional information about road condition.

A checklist with additional details of CMI activities is included in Annex B.

### 7.3 Role of the Regional Economic Communities (RECs)

The Regional Economic Communities (RECs) have a particular interest in encouraging their member countries to improve the regional transport infrastructure through effective maintenance of regional corridors. The RECs should therefore work to ensure that the policy requirement for each country to provide effective road maintenance of regional corridors is achieved, either through the application of second generation Road Maintenance Fund principles or by other means.

Each country should provide comprehensive details to the RECs, specific to the regional corridors, of road user charges applied, actual and planned road maintenance expenditure, current and anticipated road condition, and details of road maintenance carried out and planned in the future. The average cost per kilometre of each type of road maintenance along the regional corridors should also be calculated and forwarded to relevant RECs. All of this information should be placed in the public domain by the RECs, for the benefit of road stakeholders.

Each REC should use all of this monitoring data to assess whether effective road maintenance is being carried out in each country, in accordance with the policy on the maintenance of regional corridors. If any deficiencies are identified, the REC should take action to highlight any deficiencies to the relevant countries, and request that action should be taken by those countries in order to comply with this policy.

The REC should also forward the data gathered and the results of the monitoring of compliance with the policy on the maintenance of regional corridors to the African Union.
To encourage refinement of road maintenance practices across Africa, each REC should also seek to identify specific examples of good practice in road maintenance of regional corridors, prepare documentation of these examples, and circulate this documentation to the member countries of that REC, to other RECs, to CMIs, and to the African Union.

A checklist with additional details of REC activities is included in Annex C.

### 7.4 Role of the African Union

The African Union facilitates the agreement, and any revisions, of road maintenance policy applicable to all regional corridors. Progress with implementing this policy can be reviewed through the data and reports received from the RECs, and the importance of complying with agreed policy can be highlighted to member countries as necessary.

All of the data provided by the different RECs can provide a useful overview of country compliance with road maintenance for regional corridors, and a comparison of performance between different countries. If this data is provided in a standardised format, the data can be consolidated and placed in the public domain.

These activities are summarised in Annex D.
## Glossary of terms
(in the context of discussion of Road Funds)

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Annual rollover of funding</td>
<td>Carrying over unspent funds in the Road Fund from one financial year into the next financial year. This is not normally possible with expenditure as part of the government annual budget.</td>
</tr>
<tr>
<td>ARMFA</td>
<td>The African Road Maintenance Funds Association.</td>
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<tr>
<td>Audit</td>
<td>All government expenditure is normally subjected to standard government audit procedures. A Technical Audit verifies whether the correct engineering solutions were applied in maintaining a road. An Independent Audit is an independent financial audit by a firm of accountants.</td>
</tr>
<tr>
<td>Classified traffic counts</td>
<td>Counts of traffic data classified into different types of vehicle; for instance, cars, minibuses, buses, light trucks, and heavy trucks.</td>
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<tr>
<td>CMI</td>
<td>Corridor Management Institution – Various institutions already exist to coordinate activities along specific regional corridors.</td>
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<tr>
<td>Direct deposit of charges</td>
<td>Deposit of road user charges from the collection agency directly into the Road Fund account, rather than transferring via government accounts.</td>
</tr>
<tr>
<td>Earmarking</td>
<td>Dedicating a specific amount or percentage of government expenditure to a specific purpose.</td>
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<tr>
<td>Executing agency</td>
<td>The action party responsible for executing activities.</td>
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<tr>
<td>“Fee-for-service”</td>
<td>The concept that providing the road network is a service, much like providing electricity and water utilities, hence road users should pay a fee for using the roads that is dependent upon the extent of their use of this service. Normally interpreted as a fee related to the extent of road maintenance cost caused by each road user, hence to be applied mainly to heavy trucks which are the main cause of road deterioration. If the charges to road users are related directly to the service provided, it is argued that these charges are not a tax, but a commercial fee-for-service that should be outside the government taxation system.</td>
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<tr>
<td>“First generation” Road Fund</td>
<td>An unregulated fund set up with the intention of being used for expenditure on the road network. Such funds were often misused for politically selected roads projects or other purposes, and did not result in effective road maintenance.</td>
</tr>
<tr>
<td>Fiscal flexibility</td>
<td>The argument that the government should have complete flexibility to decide how to spend the government budget each year, for instance to respond to natural disasters and urgent development needs, hence none of the government budget should be “earmarked”.</td>
</tr>
<tr>
<td>Fuel Levy</td>
<td>A levy on fuel, normally to pay for road maintenance on a “fee-for-service” basis, which is not part of normal government taxation.</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Macroeconomic analysis</td>
<td>High level analysis of the whole economy of a country.</td>
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<tr>
<td>National roads</td>
<td>Roads of national level importance, normally connecting together the major towns within a country.</td>
</tr>
<tr>
<td>Overloading</td>
<td>Driving vehicles on a road that impose loads higher than the design capacity of the road. This normally occurs through overloading of heavy trucks, which then impose high axle loads on the road. Causes much more rapid deterioration of roads.</td>
</tr>
<tr>
<td>Oversight</td>
<td>Supervision of an activity to ensure that it is carried out as intended.</td>
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<tr>
<td>Performance agreement</td>
<td>An agreement of the performance that is required; for instance, what a road ministry expects a road authority to achieve and when this should be achieved.</td>
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<tr>
<td>Performance based contract</td>
<td>A contract where payment is based on achieving a particular level of service, rather than payment based on the extent of work carried out. For instance, for road maintenance, payment each month depends on whether the road is in good condition, regardless of how little or how much work was needed to achieve this.</td>
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<tr>
<td>Periodic maintenance</td>
<td>Road maintenance only carried out periodically. For a paved road, this will normally involve adding a layer to the pavement to give additional strength; for an unpaved road this is normally adding an additional layer of gravel.</td>
</tr>
<tr>
<td>Private sector</td>
<td>Commercial organisations, whose objective is to make a profit.</td>
</tr>
<tr>
<td>Public-Private Partnership (PPP)</td>
<td>The sharing of risks between the public sector and the private sector. Normally applied to projects where the risks are too great for the private sector to be able to finance a project on a purely commercial basis; the government therefore provides a sovereign guarantee for a specific part of the financial income risk and the private sector then provides the financing.</td>
</tr>
<tr>
<td>Public sector</td>
<td>The government, whose objective is the service of the public.</td>
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<tr>
<td>REC</td>
<td>Regional Economic Community</td>
</tr>
<tr>
<td>Reconstruction</td>
<td>Major reconstruction of a road that cannot be repaired.</td>
</tr>
<tr>
<td>Regional corridor</td>
<td>International strategic road corridors connecting countries together, in many cases providing land-locked countries with access to sea ports.</td>
</tr>
<tr>
<td>Regulation and monitoring</td>
<td>Regulation defines the rules according to which activities should be carried out, while monitoring involves observing whether such rules are correctly followed.</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>Restoring a road asset to good condition that has deteriorated beyond a condition where normal periodic maintenance is sufficient. For instance, when an area of the road base underneath the top layer wearing course has failed and needs to be repaired.</td>
</tr>
<tr>
<td>Ring-fencing</td>
<td>Dedicating a specific amount or percentage of government expenditure to a specific purpose (the same as earmarking).</td>
</tr>
<tr>
<td>Road Agency/Road Authority</td>
<td>An organisation set up to manage part or all of the road network of a country. The details will vary between countries, but this is normally part of achieving a separation of functions; with the transport ministry responsible for deciding policy and priorities, and providing regulation and monitoring; while the Road Agency or Road Authority is responsible</td>
</tr>
</tbody>
</table>
for supervising the execution of road improvement and road maintenance contracts. A Road Agency is more likely to be established directly by the transport ministry, while a Road Authority is usually established by an Act of Parliament.

<table>
<thead>
<tr>
<th><strong>Road assets</strong></th>
<th>The physical infrastructure of the road network, including bridges, culverts, retaining walls, safety rails, and road signs, as well as the roadway itself.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Road (Asset) Management System (RMS/RAMS)</strong></td>
<td>A system to manage road assets. Usually refers to a computerised system storing comprehensive details of road inventory and road condition, with analysis tools to optimise and schedule road maintenance activities.</td>
</tr>
<tr>
<td><strong>Road Board</strong></td>
<td>A Board with specific responsibility to oversee the operation of a road sector organisation, often a Road Agency or a Road Authority.</td>
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<tr>
<td><strong>Road concession</strong></td>
<td>A section of road for which operational responsibility, including road maintenance, has been assigned to a private sector organisation.</td>
</tr>
<tr>
<td><strong>Road condition data</strong></td>
<td>Data describing the state of deterioration of all aspects of a road asset.</td>
</tr>
<tr>
<td><strong>Road data</strong></td>
<td>All types of data about a road, including road inventory, road condition, and traffic.</td>
</tr>
<tr>
<td><strong>Road deterioration model</strong></td>
<td>A model which can be calibrated to predict the rate of deterioration of a road if appropriate data is provided.</td>
</tr>
<tr>
<td><strong>Road inventory data</strong></td>
<td>The physical description of all aspects of a road asset, including details and dimensions of the road pavement, bridges, culverts, retaining walls, safety rails, and traffic signs.</td>
</tr>
<tr>
<td><strong>Road (Maintenance) Fund Board</strong></td>
<td>A Board set up to oversee the operation of a Road Fund.</td>
</tr>
<tr>
<td><strong>Road stakeholder</strong></td>
<td>Any organisation or person that makes use of or is affected in any way by a road, or who is involved in the provision or management of the road.</td>
</tr>
<tr>
<td><strong>Road user</strong></td>
<td>Any organisation or person that makes use of a road.</td>
</tr>
<tr>
<td><strong>Road user charges (RUC)</strong></td>
<td>Charges related to the use of a road.</td>
</tr>
<tr>
<td><strong>Road user effects (RUE)</strong></td>
<td>A combination of both vehicle operating costs and other effects on road users from using a road.</td>
</tr>
<tr>
<td><strong>Routine maintenance</strong></td>
<td>Routine, day-to-day maintenance of a road to keep the road in good condition and reduce the effects of road deterioration. Normally includes (at least) clearing drains, filling potholes, sealing cracks in paved roads, clearing vegetation, and keeping traffic signs visible.</td>
</tr>
<tr>
<td><strong>Rural roads</strong></td>
<td>Roads serving rural communities, both to enable agricultural produce to be moved to markets and to provide access to health, education and other services.</td>
</tr>
<tr>
<td><strong>“Second generation” Road (Maintenance) Fund</strong></td>
<td>A regulated and monitored road fund based on the fee-for-service principle; collecting charges related to use of the roads; paying for maintenance of the road; and including a mechanism for road stakeholders to both regularly review the operation of the road fund and also have their concerns addressed if they are unhappy with the effectiveness of the road fund.</td>
</tr>
<tr>
<td><strong>Separation of functions</strong></td>
<td>The separation of deciding policy and priorities for the road sector, and monitoring progress, from responsibility for supervising the execution of road improvement and maintenance. Normally achieved by making a road agency or road authority responsible for executing work.</td>
</tr>
<tr>
<td><strong>Toll</strong></td>
<td>A fee charged for a vehicle to travel along a section of road.</td>
</tr>
<tr>
<td><strong>Traffic data</strong></td>
<td>Data about the what vehicles use the road network and when.</td>
</tr>
<tr>
<td><strong>Transit fees</strong></td>
<td>Fees charged for vehicles passing through a country that is not their home country.</td>
</tr>
<tr>
<td><strong>Transport operators</strong></td>
<td>Operators of trucks, buses and other vehicles that use the road network.</td>
</tr>
<tr>
<td><strong>Urban roads</strong></td>
<td>Roads within urban areas.</td>
</tr>
<tr>
<td><strong>Value engineering</strong></td>
<td>Analysis to maximise the output and if possible reduce the overall cost of an activity. Normally achieved by considering how much benefit is achieved from each input to the activity and looking for simplifications or alternative methods of achieving the same or better output.</td>
</tr>
<tr>
<td><strong>Value for money</strong></td>
<td>Achieving the best value for the money spent.</td>
</tr>
<tr>
<td><strong>Vehicle class</strong></td>
<td>See classified traffic counts</td>
</tr>
<tr>
<td><strong>Vehicle tax/licencing</strong></td>
<td>A tax or licencing cost that must be paid before a vehicle can use public roads, normally paid annually, and normally dependent upon the size and type of vehicle.</td>
</tr>
<tr>
<td><strong>Vehicle operating costs (VOC)</strong></td>
<td>All of the costs involved in operating a vehicle, including the cost of fuel, tyres, spare parts, maintenance, repairs, and depreciation in value.</td>
</tr>
</tbody>
</table>
9 References


Note that several of these references also include extensive bibliographies of other reports and documents about the implementation of road funds.
10 Annex

10.1 Annex A – Country activities checklist for regional corridors

Note: The ministry responsible for the maintenance of regional corridors in each country needs to ensure that responsibility for each requirement listed below is assigned to the appropriate organisation.

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Is the road inventory for all sections of regional corridors up to date?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Is the road condition data for all sections of regional corridors up to date?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Is the traffic data for all sections of regional corridors up to date?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Are regional corridor traffic predictions available for the next ten years?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Has an optimised plan been prepared for road maintenance of regional corridors for the next ten years?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Has a financial plan for road maintenance of regional corridors for the next ten years been prepared?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Has legislation been enacted to enable the road maintenance funding needed for regional corridors to be raised through road user charges?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Have road user charges been calculated that will fully fund road maintenance, and that are calculated based on the extent of road deterioration expected to be caused by each type of road user?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Do road user charges take into account possible higher costs in future years, with plans to keep road user charges reasonably constant?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Is a collection mechanism in place that ensures that all planned road user charges are efficiently collected and deposited in the road fund?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Is the road fund account held in such a way that all road fund revenue and expenditure is kept completely independent of any other funding?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Is the road fund dedicated to only to the maintenance of road assets, with all improvements of road assets funded by other means?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Is any balance in the road fund automatically carried forward from the end of one financial year to the start of the next financial year?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Are all payments from the road fund paid in full in accordance with all contract requirements, including within the payment periods specified?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Are accounts for the road fund maintained according to the same principles and in accordance with the same time schedules as government accounts?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Are all details of how the road fund operates, how decisions are made, revenue collected, and payments made in the public domain?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Does an effective mechanism exist through which road stakeholders can express their opinions regarding the operation of the road fund, and is there a procedure through which such feedback is publicly considered?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Is a technical audit carried out at regular intervals to ensure that appropriate road maintenance solutions are being applied?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Is an independent financial audit of the road fund carried out each year to confirm that financial procedures are being followed correctly?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Requirement</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>20.</td>
<td>Are details of road user charges specific the regional corridors, including planned revenue for the previous year, actual revenue for the previous year, and planned revenue for future years, regularly forwarded to relevant RECs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Are details of planned and actual road maintenance expenditure specific to the regional corridors for the previous year, and planned expenditure for future years, regularly forwarded to relevant RECs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Are details of the current condition of the road for each section of each corridor forwarded to relevant RECs and CMIs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Are details of road maintenance work carried out on each section of the corridor during the previous year forwarded to relevant RECs and CMIs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Is the average cost of each type of road maintenance per kilometre, only for regional corridors, for each type of road and each type of road maintenance, forwarded regularly to the relevant RECs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Are plans for road maintenance for the current year and for the next ten years forwarded to the relevant RECs and CMIs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Are predictions of road condition for each section of each corridor for the next ten years forwarded to relevant RECs and CMIs?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 10.2 Annex B – Corridor Management Institution (CMI) activities checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Are classified traffic counts regularly recorded for each section of the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Have classified traffic predictions been prepared for each section of the corridor for the next ten years?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Are current traffic counts and updated traffic predictions for the next ten years regularly transmitted to the organisation responsible for planning road maintenance in each country along the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Are travel times regularly recorded along each section of the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Are delays caused by border crossings, check points, and any other causes not related to road condition regularly recorded for each section of the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Are travel times and non-condition related delay times regularly transmitted to the organisation responsible for planning road maintenance in each country along the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Are there feedback mechanisms through which transport operators and other road stakeholders can express their opinions about the condition of the road and where improvements are needed along the corridor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Are road stakeholder opinions about the condition of the road and where improvements are needed along the corridor regularly transmitted to the organisations responsible for road maintenance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Are current traffic counts and updated traffic predictions for the next ten years regularly transmitted to the relevant RECs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Are travel times and non-condition related delay times regularly transmitted to the relevant RECs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Are road stakeholder opinions about the condition of the road and where improvements are needed along the corridor regularly transmitted to the relevant RECs?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 10.3 Annex C – Regional Economic Community (REC) coordination checklist

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>At regular intervals, has a summary by country of information received specific to each regional corridor of: - revenue raised from road user charges; - road maintenance expenditure; - road maintenance carried out; - road maintenance planned in the future; - current traffic and future traffic predictions; and - current road condition and anticipated future road condition been placed in the public domain?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>At regular intervals, has the average cost per kilometre of each type of road maintenance for each country been summarised and placed in the public domain to inform all road stakeholders?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>At regular intervals, has all of the information provided by countries and CMIs been assessed to determine whether an effective second generation Road Maintenance Fund organisation, or an equivalent alternative method of providing effective road maintenance, is in operation for the regional corridors passing through each country*?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>At regular intervals, have details of the conclusions reached about whether effective road maintenance is taking place in each country been placed in the public domain to inform all road stakeholders?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>If an effective second generation Road Maintenance Fund organisation, or an equivalent alternative method of providing effective road maintenance, is not in operation where a regional corridor passes through a country*, has action been taken to correct this problem?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>At regular intervals, has a summary of information about the road maintenance of all regional corridors and the status of compliance with agreed policies, organised in an agreed standard format highlighting the performance of each country, been forwarded to the African Union?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>At regular intervals, have examples of good practice in the road maintenance of regional corridors been documented and circulated to countries, other RECs, CMIs and the African Union?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* In these cases, “providing effective road maintenance” is deemed to include providing all of the necessary information to the RECs in order that the RECs can confirm that road maintenance is taking place as intended.
10.4 Annex D – African Union activities

1. Facilitate agreement of road maintenance policy applicable to all regional corridors.
2. Review data and reports received from RECs about the maintenance of regional corridors.
3. Highlight to countries, as necessary, the importance of complying with the agreed policy on the maintenance of regional corridors.
4. Consolidate data from all RECs on country compliance with road maintenance policy and country road maintenance performance for the regional corridors.
13.1 Improving Port Efficiency

By Edwin Lock

Table of Contents

2 Introduction Port Efficiency ................................................................................................................. 3

2.1 Definition of Port Efficiency ........................................................................................................... 3

2.2 The role of ports in transport corridors and the importance of port efficiency ........ 5

2.3 Port efficiency indicators ................................................................................................................ 5

2.3.1 Port approach ............................................................................................................................. 6

2.3.2 Container terminal ....................................................................................................................... 6

2.3.3 Yard/hinterland operations ......................................................................................................... 6

2.3.4 Organisation ............................................................................................................................... 7

2.3.5 Financial ......................................................................................................................................... 7

2.4 Analysis of International Logistic Performance Indicators of African countries .... 7

2.5 Principal port efficiency issues in African ports ......................................................................... 8

3 Policy .................................................................................................................................................. 9

3.1 Introduction ....................................................................................................................................... 9

3.2 Policy framework ........................................................................................................................... 10

4 Guidelines ......................................................................................................................................... 11

4.1 Identify key Port Efficiency Indicators (PEIs) ............................................................................ 11

4.2 Collect international benchmarks for PEIs ............................................................................... 11

4.3 Collect PEIs for African ports ....................................................................................................... 11

4.4 Analyse PEIs of African container ports ...................................................................................... 11

4.5 Identify tools to increase port efficiency and allocate tools to specific ports ................ 12

4.6 Monitor PEIs of principal African container ports over the years ........................................ 12
1 Introduction Port Efficiency

1.1 Definition of Port Efficiency

A port is, in general, the principal nodal point in the total transport chain of a country for imports and exports. An efficient operated port (or container terminal) will therefore support the economy of a country.

Ports have traditionally evaluated their performance by comparing their actual and maximum technical design throughputs (measured in tonnage or number of containers handled). If a port’s actual throughput approaches its maximum technical design throughput over time, the conclusion is that its performance has improved over time. Maximum technical design throughputs have typically been used in such evaluations, defined as the maximum throughput that a port can physically handle under certain conditions (based on available quay length, handling equipment and yard space).

In an environment in which ports have natural hinterlands and are not in competition with one another, a maximum technical design evaluation methodology of comparing actual and maximum technical design throughputs may be appropriate. In an environment in which ports are in competition with one another (where shippers and carriers are part of the port-selection process), a port should not only be concerned with whether it can physically handle cargo, but also whether it can compete for cargo. In a competitive environment, port time-related costs in addition to port charges incurred by shippers and carriers are important determinants in port selection. Since port cargo remains in the shipper’s inventory (assuming the shipper retains ownership), the shipper incurs time-related inventory (or logistics) costs in port; water and inland carriers also incur port time-related costs, e.g. depreciation and insurance costs on their ships and vehicles while in port. A port can reduce these time-related costs by reducing the time that the cargo of shippers and the ships and vehicles of carriers are in port, which is by improving the quality of its service.

The efficiency of a port is part of the total port value chain that includes maritime, terminal and hinterland operations. These dimensions are interrelated since inefficiencies in one dimension are likely to impact the others. For instance, issues in terminal operations are most likely to negatively impact maritime and hinterland operations with delays.

Maritime operations:

The efficiency of the maritime access is a component of port performance, which includes anchorage where ships are waiting for an available berthing slot. Long waiting times at anchorage can be the outcome of a lack of berthing slots able to accommodate specific ship classes (e.g. draft and cargo type) as well as terminal productivity issues. Ports, depending on their site and configuration, can have complex in port navigation requiring pilotage and tugs through access channels and turn basins. The value of enhancing such a system is clearly to the benefit of maritime shipping companies.
Terminal operations:

Represent the most common performance indicator that is used to assess port efficiency. For container terminal operations this commonly involve several key operations. Crane performance is a common bottleneck in terms of the number of movements per crane per hour and the number of cranes available to service a containership. For maritime shipping companies, this is a crucial factor since it is related to the amount of time their ships are going to spend at the port. The manner which cargo (containers) is brought back and forth to the storage yard is also a component of port performance. Many container terminals use holsters or straddle carriers for such operations. Container storage yard operations involve the organization of stacking and its related stacking density, an important variable determining terminal capacity. When trucks enter the terminal to pick up or drop off cargo space and equipment is required to ensure that this transloading operation (yard to truck or truck to yard) performs well. This is often a critical bottleneck for trucking companies since it dictates the amount of time they will spend at the terminal. Gate performance concerns the efficiency of tasks related to document processing and security inspections so that a truck is admitted and cleared to pick up or drop cargo at the facility. Gates used above their capacity are characterized by long truck lines waiting to be processed and enter the terminal for cargo they are already chartered to handle. For terminals having on-dock rail facilities, the performance of the rail loading / unloading equipment is an important component of the terminal’s performance.

Hinterland operations:

Can involve all the transport and distribution activities servicing the port’s customers, such as an inland port. However, for practical purposes, it generally focuses on inland operations adjacent to the port area (often labelled as the back of the port). The key factor in hinterland operations is the capacity of the local road network in areas adjacent to the port. Congestion and bottlenecks at street intersections impair the port’s performance in many of the supply chain management strategies of the port’s customers. Some ports have near-dock rail yards that must be serviced through the terminals’ gates. In many gateway ports transloading activities that are transferring the contents of maritime containers into domestic truckloads (or domestic containers), or vice-versa, are an element of the performance of hinterland operations. Port authorities have an oversight, either directly or indirectly, of the port efficiency.

While terminal operations are usually concessioned to private operators, port authorities tend to have a direct oversight of maritime operations and several elements of hinterland operations, such as local roads directly connected to the port terminals, some of which on land owned by the port. Although cities are not directly involved in port operations and commonly have limited, if any, jurisdiction on port land, they commonly provide and maintain crucial road infrastructure connecting the port with its hinterland. They also bear many of the externalities of port operations, namely local congestion. Therefore, the port authority and the city are important stakeholders in the port performance field.
1.2 The role of ports in transport corridors and the importance of port efficiency

A transport corridor can be defined as a coordinated bundle of transport and logistics infrastructure and services that facilitates transport flows between major centres of economic activity (ref. World Bank).

Ports are essential components of transport corridors, especially in respect to intercontinental transport flows. A port can be considered the principal entry and/or exit point of a transport corridor. Maritime transport corridors are, by definition, defined by transport lanes between 2 or more ports.

The principal role of a port in a transport corridor is to act as the collecting point for container groupage to hinterland destinations or for the collection of containers for destinations overseas.

As a port is one of the principal components of international transport corridors, the efficiency of port operations defines the efficiency of the total transport corridor.

1.3 Port efficiency indicators

The principal port efficiency indicators are:

- average port charge per throughput TEU.
- average ship discharge and loading rate (TEU per crane per hour).
- average Customs clearance time of a container (days).

Container terminals can also be basically compared with each other on the following basis:

<table>
<thead>
<tr>
<th></th>
<th>Output</th>
<th>Output</th>
<th>Input</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEU</td>
<td>Tonnage</td>
<td>US$ - Assets</td>
<td>Quay length (m)</td>
</tr>
<tr>
<td>Port 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port 3</td>
<td></td>
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</tr>
</tbody>
</table>

From this table, the TEU handled per metre quay length and per invested amount can be calculated and it shows the usage of a certain container berth, at what cost of infrastructure.

Port efficiency indicators can be divided over the following operations components:

1. Port approach;
2. Container terminal, and;
3. Yard/hinterland operations.

Other indicators for port performance are:

4. Organisation related, and;
5. Financial.

1.3.1 Port approach

- Average amount of time for ships waiting for berths (in hours, days).
- Annual average daily percent of time that the port’s channel/approach adheres to authorized depth and width dimensions.
- Annual average daily percent of time that the port’s channel/approach is open to navigation.

1.3.2 Container terminal

- Average delay to ships while alongside berths (in hours).
- Annual average ship loading service rate: TEU loaded on ships per crane per hour of loading time.
- Annual average ship unloading service rate: TEU unloaded from ships per crane per hour of unloading time.
- Number of ships and amount of cargo handled (in TEU and tonnes).
- Berth occupancy rate (percentage of total time a ship berth is occupied by a vessel).
- Cargo handled per man-shift (total TEU handled divided by the number of man-shifts).
- Annual average daily percent of time that the port’s berth adheres to authorized depth and width dimensions.
- Annual average daily percent of time that the port’s berth is open to the berthing of ships.
- Annual expected probability of damage to ships while in port.
- Annual expected probability of loss of ship property while in port.
- Annual expected probability of damage to shippers’ cargo while in port.
- Annual expected probability of the loss of shippers’ cargo while in port.

1.3.3 Yard/hinterland operations

- Truck queuing times at port gates (in hours).
- Truck turnaround time (in hours).
- Annual average loading service rate for port vehicles of inland carriers (TEU loaded on port vehicles per hour of loading time).
- Annual average unloading service rate for port vehicles of inland carriers (TEU loaded from port vehicles per hour of unloading time).
- Annual average daily percent of time that the port’s entrance gate is open to inland-carrier vehicles.
- Annual average daily percent of time that the port’s departure gate is open to inland-carrier vehicles.
- Annual expected probability of damage to inland-carrier vehicles while in port.
- Annual expected probability of loss to the property of inland-carrier vehicles while in port.
1.3.4 Organisation

- Average annual amount of full time units (ftu) personnel at the container terminal.
- Annual accidents/casualties of container terminal personnel.

1.3.5 Financial

- Annual average port charge per TEU.
- Personnel expenses/revenues from container operations.

1.4 Analysis of International Logistic Performance Indicators of African countries

The International Logistics Performance Index (developed by the World Bank Group) is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. Ports play an important role in trade logistics and their performance is an integral part of the performance indicator.

LPI 2014 ranks 160 countries on six dimensions of trade (customs performance, infrastructure quality and timeliness of shipments) that have increasingly been recognized as important to development. The data used in the ranking comes from a survey of logistics professionals who are asked questions about the foreign countries in which they operate.

The components analysed in the International LPI were chosen based on recent theoretical and empirical research and on the practical experience of logistics professionals involved in international freight forwarding. They are:

- The efficiency of customs and border management clearance (Customs).
- The quality of trade and transport infrastructure (Infrastructure).
- The ease of arranging competitively priced shipments (Ease of arranging shipments).
- The competence and quality of logistics services—trucking, forwarding, and customs brokerage (Quality of logistics services).
- The ability to track and trace consignments (Tracking and tracing).
- The frequency with which shipments reach consignees within scheduled or expected delivery times (Timeliness).

The LPI uses standard statistical techniques to aggregate the data into a single indicator that can be used for cross-country comparisons.

The LPI gives an indication of a country’s ability to facilitate international trade and the related costs of the logistic chain.

The International LPI table, included in the Annex, shows the LPI in 2014 for 42 African countries and for comparison purposes also Germany (ranked number 1) has been included.

The best performing African country is South Africa, ranked on the 34th place, while Somalia is ranked last (position 160).
The above table shows that from the African countries, South Africa performs overall the best and on each of the components.

In addition, the index also shows that the African countries (except for South Africa) are amongst the bottom half performers of the world and therefore it can be concluded that the African countries have opportunities to improve their overall logistics organisation, including port efficiency, which will result in lower overall transportation costs and a higher service level.

1.5 Principal port efficiency issues in African ports

The principal port efficiency issues at African ports can be summarised as follows:

**Maritime access:**
- Ship waiting time because of inaccessibility of the port approach.
- Ship waiting time because of unavailability of berthing space.

**Sea-to-shore:**
- Ship waiting time along berth because of lack of handling equipment.
- Ship waiting time along berth because of lack of labour.

**Terminal:**
- Long container dwell times due to administrative/Customs/inspection procedures.
- Damage to containers.
- Pilferage of container content.
- Slow handling of containers due to lack of (appropriate) equipment.

**Port gate/hinterland connections:**
- Restricted capacity of port access gates resulting in long truck waiting times.
- Road connections to the hinterland have insufficient capacity.
- Hardly any competition between hinterland transport modes (road, rail, inland waterways).
- High road transport prices (caused by lack of trucks and restricted amount of trucking companies)

All above port efficiency issues result in high container terminal handling costs and therefore in higher total transportation costs for containers to and from African countries.

<table>
<thead>
<tr>
<th>BOX: Global Need for Container Port Productivity Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Port Reform Toolkit of the World Bank concludes that “the economics of containership operation are critically dependent on port productivity . . . (and) continued general worldwide improvements in port productivity will so fundamentally alter the container shipping cost environment that, in the absence of any technological constraint, ship size optimums for all routes will continue to increase as they have done in the past”</td>
</tr>
</tbody>
</table>
MODULE 13 IMPROVING PORTS EFFICIENCY & ESTABLISHING HUB PORTS

(see chapter on Hub and Feeder Ports). A typical container terminal today has a static capacity of 40–200 TEU per hectare (depending on the yard stacking system in use), crane productivity of 25–30 gross moves per gantry-crane hour, average container dwell time of five to six days, and truck turnaround time of one hour. But future terminal requirements will be considerably more demanding. To accommodate the mega containerships coming into service, new terminals will require a static capacity density of 400–800 TEU per hectare, crane productivity of 200 moves per ship-hour at berth, maximum three days average dwell time, and truck turnaround of less than 30 minutes. Water depth at the future terminal will need to be at least 15 to 16 meters and increasingly larger cranes will be required to accommodate ships with a deck stack of up to 23 rows across.

2 Policy

The objective of the policy for port efficiency is to increase the operational efficiency at African Sub-Saharan continent container terminals.

2.1 Introduction

Transport costs have increased their relative importance as a barrier to trade. Distance, containerization, volume exported, and, most important, the level of seaport efficiency, are important determinants of transport costs. Port efficiency is not only associated with infrastructure, but also with the existence of organized crime and excessive regulation. Recent literature has emphasized the importance of transport costs and infrastructure in explaining trade, access to markets, and increases in per capita income. For most African countries transport costs are a greater barrier to EU and US markets than import tariffs. Clark, Dollar, and Micco showed that improving the efficiency of a port from the 25th to the 75th percentile reduces shipping costs by 12 percent. (On average, having bad ports is equivalent to being 60 percent farther away from markets.) Inefficient ports also increase handling costs, which are part of shipping costs.

The improvement of port efficiency at African container terminals will have a positive impact on the overall transport logistic costs to African countries as it will decrease the amount of time containers are transported throughout the logistic chain.

Moreover, it will improve and extend the connectivity of the African region to the rest of the world as the African container transport sector will become more efficient.

An increase of the container port efficiency in Africa will also increase the opportunity to have safer and more secure transport of goods. In addition, the resulting rationalizing of trade flows will have a positive effect on the environment.

One of the principal bottlenecks with regard to container transport in African ports is the policy of the main shipping lines to introduce bigger container vessels on all trade lanes, including Africa. The economic justification of the introduction of bigger vessels, from the shipping line perspective, is the
resulting lower slot costs. However, on the terminal side, authorities are forced to adjust sea port infrastructure to be able to accept those bigger vessels.

### 2.2 Policy framework

The primary objective of this section is to provide a policy framework for increasing port efficiency at container terminals in Sub-Saharan Africa.

The governance of the container terminal sector lies primarily with the Port Authorities, which in turn most of the times fall under the Ministry of Transport.

Therefore, the Port Authorities should ensure improvements of port efficiency.

A key element of port management is the creation of mechanisms to protect the public interest. In creating such mechanisms, it is important to keep public statutory and regulatory oversight responsibilities separate from commercial activities (World Bank, 2007). In this context, governments provide economic and technical oversight without getting involved in commercial operations.

Increasing private sector participation in the delivery of port services may be seen as an instrument to achieve well-defined public interest objectives.

One “best practice” for the management of smaller ports in developing countries is the landlord port model. In this model the port authority may still own the port, but infrastructure is leased out to private operators. Most, if not all, port functions remain in the private sector, including cargo handling.

In most African countries, governments are responsible for providing basic transport infrastructure, which means: sufficient and safe maritime access, sufficient berthing capacity and yard space and sufficient and appropriate hinterland connections.

The private sector is involved in the actual handling of containers and should have sufficient handling equipment (ship-to-shore cranes and yard equipment) and trained personnel.

Port efficiency goals should be included in the concession (or other PPP) contracts, including monitoring arrangements and penalties in case of non-compliance.

Recommendations to improve port efficiency in African ports:

**Infrastructure:**

Ensure sufficient capacity and quality of port infrastructure: access channel, quay length, yard space, access gates and hinterland connections (rail and road).

The infrastructure should be well maintained.

**Equipment:**

Ensure sufficient ship-to-shore container cranes and yard handling equipment.

Equipment should be well maintained and spare parts available in case required.

Equipment should be operated by well trained personnel.

**Institutional / Organisational:**
The Port Authority should be sufficiently ‘equipped’, in terms of manpower capacity and capability, to fulfil its regulatory function. Training of personnel is essential in this respect.

**Financials:**

Port dues and container handling tariffs should be cost covering and calculated on a transparent basis.

**Port efficiency indicators:**

It is recommended that the REC is made responsible for defining and monitoring of the port efficiency indicators.

3 Guidelines

This section provides a set of instructions with required information and tools, incl. investments, regulations and institutional framework in order to increase port efficiency at the container terminals in the African Sub-Saharan region.

The objective of the guidelines is for Port Authorities to have a reference framework when defining the port efficiency parameters to be included in concessions or other PPP arrangements for the exploitation of container terminals.

The following activities have to be carried out to increase port efficiency at African container terminals.

3.1 Identify key Port Efficiency Indicators (PEIs)

The key PEIs for each component (ship approach, container terminal and yard/hinterland connections) should be identified and agreed upon by all involved African countries.

Clear instructions are to be prepared how to calculate those key PEIs.

3.2 Collect international benchmarks for PEIs

For each of the identified key PEIs the international benchmarks are to be collected.

Make a choice of international ports which are to be used for international benchmarking.

3.3 Collect PEIs for African ports

For each African container terminal, the key PEIs are to be collected and goals set for the future.

It is recommended to nominate the REC to collect and monitor PEIs of each African container terminal.

3.4 Analyse PEIs of African container ports

An analysis per African container terminal shall be prepared:

- overview of key PEIs
- operational constrains causing low PEIs
• advise on how to improve port efficiency

3.5 Identify tools to increase port efficiency and allocate tools to specific ports

Per African container terminal tools are identified that will increase port efficiency.

Possible tools:

• Investments in maritime infrastructure and hinterland connections.
• Acquisition of handling equipment.
• Training of personnel (operations, maintenance, management, etc.).

Governments can promote private sector involvement in port efficiency improvement by:

• Tax incentives.
• (Temporarily) lower port dues and land lease fees.

It is advised that Governments/Port Authorities include port efficiency objectives in container terminal concession (or other PPP) contracts.

3.6 Monitor PEIs of principal African container ports over the years

Once the initial PEIs of each African container terminal have been determined, those PEIs should be monitored over the years and trends analysed.

Publish results of the PEI monitoring on a yearly basis.
MODULE 13 IMPROVING PORTS EFFICIENCY &
ESTABLISHING HUB PORTS

Module 13.2 Establishing Hub Ports
By Edwin Lock

Table of Contents

1 Introduction Hub and Feeder Ports .......................................................... 2
   1.1 Containerisation ................................................................. 2
   1.2 Introduction of the hub and feeder ports concept ...................... 3
   1.3 The role of hub and feeder ports in transport corridors .......... 5
   1.4 Major trends in container shipping ...................................... 5
       1.4.1 Development of container vessel size ......................... 5
       1.4.2 Global shipping lines, alliances and global container operators ... 6
       1.4.3 Container hub ports ................................................... 8
   1.5 Bottlenecks at African Container Terminals ......................... 8

2 Policy .................................................................................... 10
   2.1 Introduction .......................................................................... 10
   2.2 Policy Framework ............................................................ 11
   2.3 Selection Criteria for a Hub Port ........................................ 12

3 Guidelines .............................................................................. 14
   3.1 Present Container Terminals per African Region ................ 14
   3.2 Terminal Characteristics and Operations .............................. 14
   3.3 Container Market .............................................................. 14
   3.4 Terminal Expansion and Green Field Development Plans ....... 14
   3.5 Availability and quality of hinterland connections: road, rail and inland waterways 15
   3.6 Availability of inland container deports/dry ports/multimodal centres .... 15
   3.7 Total user costs ................................................................. 15
   3.8 Location of port to container shipping trunk routes and non-African principal transhipment hubs ........................................... 15
   3.9 Principal Port Efficiency Indicators (PEIs) ............................ 16
   3.10 Total Costs for Development of the Hub Port ..................... 16
   3.11 Multi Criteria Analysis ..................................................... 16
1 Introduction Hub and Feeder Ports

1.1 Containerisation

The Hub and Feeder Ports concept has been made possible by the introduction of containerisation in the global production and transport chain, which started in the 1960-ies.

Container ports and terminals form an essential component of the present economy. Containerisation since the middle of the 20th century has dramatically reduced the transport cost of international trade. The largely reduced transport cost derived by containerisation means that handling goods has become highly automated and efficient between most transport modes and transport goods from anywhere to anywhere have therefore become a feasible operation for many enterprises (Levinson, 2008). Once isolated factories have become integrated into a global network, and more multinational and international companies are present in many markets since they are able to choose the cheapest location in which to produce. As a result, today’s economy is formed by the offshoring, outsourcing and extensive use of global supply chains, to which container handling and transport have contributed significantly. Since the introduction of the first internationally-standardised container in the 1960s, container trade has grown rapidly to reach an estimated 143 million in TEU and 1.24 billion in tonnage (UNTCAD, 2008), comprising over 70% of the value of world international seaborne trade (Drewry Shipping Consultants, 2006). In 2014, container trade reached 171 million TEU with a total tonnage of 1.63 billion (UNCTAD Maritime Transport Review, 2016).

One of the main drivers of this boost in the container transport and handling industry is the increase of global GDP (the principal indicator for economic development). Focussing on the past decade, the average annual global GDP growth from 1998 to 2007 was 3%. During the same period, the average growth of merchandise and seaborne trade were 6% and 5%, respectively, approximately double the global GDP growth, and the average growth of container trade was 10%, three times greater than global GDP growth. Trade has been more than proportionally affected by fluctuations in output, because the way production is now organised. The globalisation of the supply chain has increased its responsiveness: stages of production that were once local are now much more likely to be carried out abroad.

Container port traffic is also more than proportionally affected by fluctuations in container trade, with a faster growing rate on average; due to transhipment traffic. Container trade is a part of seaborne trade and merchandise trade; the latter two outpace world output on average, and are also more than proportionally affected by fluctuations in world output.

Before the global economic downturn, the world’s container port traffic had been growing at an average rate of 12% per year from 1998 to 2007, which is more than proportionally affected by fluctuations in container trade.

In the past two decades the steady growth of seaborne trade has resulted in the increase of container ships, container ports and their terminals. The structure of the shipping market is, moreover,
continuously evolving. On the carrier side, shipping companies form consortia and alliances; on the port side, global terminal operators and dedicated container terminals have emerged.

1.2 Introduction of the hub and feeder ports concept

From a network perspective, the location and function of container terminal facilities is not always guided by the proximity of the port toward a local/regional hinterland region. Globally, the cargo distribution patterns of container ports not only rely on connecting maritime flows to inland transport modes (road haulage, rail and barge). In a growing number of ports, container shipping lines send their deep-sea vessels to intermediate locations between origins and destinations where containers are transhipped between vessels. Thus, container cargo is transhipped by linking two or more liner services. These intermediate nodes are added to a network when considered appropriate by the network operators in view of overall performance of the network. Shipping lines, in fact, aims at increasing the average utilization rate of vessels (i.e. to minimize empty slots on-board), in order to achieve economies of scale and go to break-even.

Three forms of sea-sea transhipment exist (ref. Ducruet and Notteboom, 2012):

- hub-and-spoke (hub/feeder);
- interlining, and
- relay.

In all three cases a deep-sea vessel discharges containers at the transhipment terminal which is later on - typically within 1 to 3 days - picked up by a smaller container ship (feeder) or another large deep-sea vessel (relay and interlining). Drewry (2010) estimates that 85% of the global transhipment market is connected to hub-and-spoke operations and 15% to relay and interlining. These figures can vary significantly between individual transhipment ports.

Originally, transhipment operations were introduced by shipping lines by adopting the above mentioned hub-and-spoke scheme, for serving small ports holding an insufficient nautical accessibility (e.g., river and/or terminal depth, canal and tidal constraints, etc.) and/or endowment of infrastructure (e.g. quay length, yard space, etc.) and superstructures (number and type of cranes, warehouses, rail marshalling yards, etc.).

Later on, given the increasing feeding costs, shipping lines progressively introduced other forms of transhipment, i.e. relay and interlining, which do allow to “multiply” the destinations (ports) served, without the necessity to deploy additional (small) vessels.

The early transhipment ports started developing in the Far-East since the 1970s/1980s for connecting those countries and regions not directly served by main-haul shipping services. Singapore, Kaohsiung (Taiwan), Busan (South Korea) and, to a lesser extent, Hong Kong (China SAR) were the pioneering ports extensively used by major ocean carriers for transshipping containers. Later on, almost pure transshipment terminals/ports (i.e. with a transshipment incidence of 75% or more) emerged primarily since the mid-1990s within many global port systems: Freeport (Bahamas), Salalah (Oman), Tanjung Pelepas (Malaysia), Gioia Tauro, Algeciras, Taranto, Cagliari, Damietta and Malta in the Mediterranean, to name but a few.
The following figure shows the three types of container shipping networks.

Container transhipment hubs have a range of common characteristics in terms of nautical accessibility, proximity to main shipping lanes (i.e. low diversion distance from the trunk routes) and ownership, in whole or in part, by carriers or international terminal operators. These nodes multiply shipping options and improve connectivity within the network through their pivotal role in regional hub-and-spoke networks and in cargo relay and interlining operations between the carriers’ east–west services and other inter- and intra-regional services. Next to the ‘pure’ transhipment hubs, there are many ports combining significant gateway cargo flows with a hinterland orientation with transhipment flows.

For the different regions in Africa it is essential to identify the possibilities to establish a hub and feeder network and if such a network is economically justified compared to an interlining or relay network.
1.3 The role of hub and feeder ports in transport corridors

A transport corridor can be defined as a coordinated bundle of transport and logistics infrastructure and services that facilitates transport flows between major centres of economic activity (ref. World Bank).

Ports are essential components of transport corridors, especially in respect to intercontinental transport flows. A port can be considered the principal entry and/or exit point of a transport corridor. Maritime transport corridors are, by definition, defined by transport lanes between 2 or more ports.

The principal role of a port in a transport corridor is to act as the collecting point for container groupage to hinterland destinations or for the collection of containers for destinations overseas.

In transport corridors a hub port is considered the primary entry/exit point while the feeder ports predominantly serve their local markets.

1.4 Major trends in container shipping

In container shipping 3 major trends are occurring that influence the container transportation industry considerably. Firstly, since the introduction of containers, the vessel size has been increasing and secondly, the market dominance of global shipping lines, alliances and port operators. Thirdly, the container transportation industry has seen the establishment of container hub ports.

1.4.1 Development of container vessel size

The first generation containerships at the end of the 1960-ies were modified bulk vessels or tankers and limited to carrying containers on converted decks. They had their own cranes on deck as most port terminals were not equipped to handle containers. Capacity of those vessels was 500 – 800 TEU.

The next generation, the first fully cellular containerships (FCC), were made in the 1970s and had a capacity of 1,000 – 2,500 TEU.

The economies of scale quickly justified the construction of ever-larger containerships. The size limit of the Panama Canal, known as the Panamax standard, was set in 1985 at a capacity of around 4,000 TEUs.

The growth of global trade in 1990s justified capacities exceeding the Panamax standard and requiring modifications of ports, such as deeper drafts (at least 43 feet) and costly crane systems. This resulted in the coming on-stream of Post Panamax vessels with a capacity of 4,000 – 5,000 TEU and Post Panamax II vessels (6,000 – 8,000 TEU).

Latest developments of container vessels are the New Panamax vessels with a capacity of 12,500 TEU. These ships are designed to fit exactly into the Panama Canal's new locks (ready in 2016).

And even bigger, the Triple E vessels with a capacity of 18,000 TEU. These exceed the new Panama Canal lock dimensions and are generally limited to routes between Asia and Europe.
The next figure shows the development of container vessel size over the years.

The increasing size of container vessels puts pressure on container ports to adapt their infrastructure and handling equipment. Access channels, turning basins and berths need to be dredged to new required berth depths. Quay wall structures need to be re-enforced (or re-built) to be able to install ship-shore cranes that can handle the bigger container vessels and yard capacity needs to be increased as bigger batches of container are dropped off at one ship call.

The following table shows the consequences in terms of quay wall length and berth depth for container ports of increasing size of container vessels.

<table>
<thead>
<tr>
<th>Generation</th>
<th>TEU capacity</th>
<th>Length overall (m)</th>
<th>Beam (m)</th>
<th>Maximum draught (m)</th>
<th>Required berth depth (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First generation: 1968</td>
<td>1,100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second generation: 1970-80</td>
<td>2-3,000</td>
<td>213</td>
<td>27.4</td>
<td>10.8</td>
<td>12.0</td>
</tr>
<tr>
<td>Panamax: 1980-90</td>
<td>3-4,500</td>
<td>294</td>
<td>32.0</td>
<td>12.2</td>
<td>12.8-13.0</td>
</tr>
<tr>
<td>Post-panamax: 1988-95</td>
<td>4-5,000</td>
<td>280-305</td>
<td>41.1</td>
<td>12.7</td>
<td>13.5-14.0</td>
</tr>
<tr>
<td>Fifth generation: 1996-2005</td>
<td>6,400-8,000</td>
<td>300-347</td>
<td>42.9</td>
<td>14.0-14.5</td>
<td>14.8-15.3</td>
</tr>
<tr>
<td>Super post-panamax: 1997-&gt;</td>
<td>8,000-11,400</td>
<td>320-380</td>
<td>43-47</td>
<td>14.5-15.0</td>
<td>15.3-15.8</td>
</tr>
<tr>
<td>Ultra large container ships: 2005-&gt;</td>
<td>14,500</td>
<td>360-400</td>
<td>55.4</td>
<td>15.5</td>
<td>16.3</td>
</tr>
<tr>
<td>New-panamax: 2010</td>
<td>12,500</td>
<td>366</td>
<td>49.0</td>
<td>15.2</td>
<td>16.0</td>
</tr>
<tr>
<td>Maersk EEE Class</td>
<td>18,000</td>
<td>400</td>
<td>59.0</td>
<td>15.5</td>
<td>16.3</td>
</tr>
</tbody>
</table>

1.4.2 Global shipping lines, alliances and global container operators

Larger vessel size imposes challenges for both carriers and container ports. The ever-expanding container ship size is also the result of the existence of increasing returns to scale in container shipping. The large container ship indeed lowers the unit cost of transporting containers, but it also underlines the concentration of power in the container shipping market. The liner shipping market is a classic example of an oligopoly, which consists of a limited number of large shipping companies that are united in various forms of cartels, shipping conferences and alliances. From this perspective, the market concentration of the container shipping industry has risen markedly: the marketshare of the 10 biggest world carriers increased from 50% of the world capacity in January 2000 to 60% in January 2007, and during the same period the aggregate market share of the five biggest carriers rose from 33% to 43% (Cariou, 2008). The massive size of container carriers underscores not only the
competition for power amongst the carriers but also brings to light the competition between carriers and their upstream and downstream industries.

The massive size of container ships directly challenges the efficiency of container ports. The competition between container ports was for a long time not very intensive because ports are location specific. However, with the increasing proportion of transhipment traffic within the total container port traffic, the nature of container ports has been changed, and competition among ports has intensified. Ports are now not only competing with nearby ports, but also with ports relatively far away. For example, the Port of Gioia Tauro (South Italy, Mediterranean Sea) competes with the Port of Rotterdam (West Netherlands, North Sea) for the continental European market.

With the market concentration of the container carrier industry, there is also a corresponding market concentration in the container port industry, which is derived from the new market structure of the container handling industry.

Nowadays container terminals compete for more traffic with each other than the container ports do. The emergence of global terminal operators means that the market share is now concentrated in the hands of a few global terminal operators, e.g. ICTSI, PSA and APM.

There are several reasons for the flourishing of terminal operators:

1. A dramatic increase in stevedoring costs, due to vessel size, reflected in the necessary upgrades on the facilities, i.e. channel depth, berth length, draught and ship-shore cranes.
2. Port privatisation since the 1980s, which has allowed private money with a range of objectives and sources distinct from public sector funds to enter the capital-intensive port industry and tackle the fierce competition.
3. Increasing transhipment traffic, which has changed the nature of container terminals, because shipping lines and shippers prefer to call at terminals that provide good service rather than ports at specific locations.
4. Horizontal integration, which is occurring in the container terminal operator industry, in order to re-gain the bargaining power from mega-shipping companies and shippers, thus leading to the development of a few major international terminal operators.

The terminal operators may be either an independent stevedore company (e.g. ICTSI) or a carrier-related operation company (APM Terminals); and within these two types of terminal operator, we see either horizontal or vertical integration. Horizontal integration refers to the acquisition of additional business activities at the same level of the value chain. Horizontal integration develops in order to obtain optimal scale, to maintain a competitive position within the industry, and to gain greater bargaining power over their suppliers or consumers. Horizontal integration exists in both the container ocean carrier and container terminal operating industries. Vertical integration describes the expansion of a firm’s business activities into upstream or downstream activities.

Vertical integration exists between ocean carriers and terminal operators. Carrier-operated terminals, also known as dedicated terminals, are commonly used by ocean carriers nowadays as a means of securing and controlling terminal capacity in order to enhance the reliability of their service. Vertical
integration may also encompass inland transport and distribution centres, in order to ensure that the whole supply chain is integrated.

Consequently, the efficiency of container ports and terminals has become ever more important. As a connecting link between different transport modes in the global logistics chain, container ports and terminals are vital to the efficiency of the whole chain. Apart from their pivotal role in the global trade network, intensifying port and terminal competition worldwide also highlights the efficiency of container ports and terminals as a key issue for operators. The growing proportion of transhipment traffic indicates that container port and terminal traffic will continue to outpace the growth of container trade, which in turn is growing more rapidly than merchandise trade and GDP growth in general. The increasing demand does not reduce the competition; on the contrary, ports and terminals compete harder for their customers, the shipping lines. The container shipping market is controlled by a few liner companies that have considerable bargaining power over the container handling industry, i.e. over ports and terminals. Ports and terminals must therefore be better able to accommodate increasing container traffic and compete for liner companies. Within this context, the efficiency remains a fundamental concern in the container handling industry.

1.4.3 Container hub ports

Many container hubs have emerged over the past decades on island locations or on locations without a significant local hinterland to fulfil a role of intermediary within global maritime networks. They are close to points of convergence of maritime shipping routes (low deviation) where traffic bound to different routes can be transhipped. This is known as a relay function. Intermediate hubs tend to be located nearby major bottlenecks in global maritime networks (Strait of Malacca, Mediterranean or the Caribbean) as they take advantage of the convergence effect with a minimal deviation from shipping routes. For ports that specialize in transhipment, limited inland investments are required since most of the cargo is transhipped from ship to ship with a temporary warehousing at the port facilities. The footprint such transhipment hub terminals have on the local or regional transport system is thus limited. In addition, the terminal operator does not have to wait for local/regional transport agencies to provide better accessibility to the terminal, which is often a source of conflict between the port and the city/region. In other cases, the transhipment hub can also benefit from being able to handle a significant share of local cargo. The confers the advantage to shipping lines of being able to combine the benefits of using the transhipment hub to access feeder and relay services as well as with the benefit of a local cargo base.

1.5 Bottlenecks at African Container Terminals

For the hub and feeder port concept to work in Africa, it is essential that the container terminal operations and related activities (Customs Clearance, hinterland connections) perform well.

At present, several problems exist at African ports which will hamper the introduction of the hub and feeder port concept.

Another important aspect is the present and future demand for container transport from and to the African region.
In order for the hub and feeder concept to work in the African region, it is essential that the flow of containers is unhampered and that all identified bottlenecks are removed.

The following bottlenecks exist at African container terminals:

   a) **Unclear port management structure and legal framework**

   In many African countries the port management structure is not clear enough to attract (foreign) investments, required to upgrade container terminals or built new one.

   In addition, the local laws and the juridical system are not designed to protect the interests of the (foreign) investor.

   b) **Customs clearance and documentation flow**

   Many African countries have a policy of requiring 100% of containers to be customs inspected. This creates a host of logistical issues, as each box needs to be shifted several times, space needs to be allocated for the container to be set down, and lifting equipment, freight parties all need to be coordinated. Demanding customs officers means that cargoes are often held up because of minor documentation discrepancy, or markings on goods not done in the language stipulated, and insistence on full compliance to the smallest details. The port is not able to run its own 24x7, 3 shifts operation as port working hours are quite often limited to those of the Customs Departments. In addition to customs controls, sanitary, veterinarian and agriculture, commercial and trade controls further add more complication and coordination delays. All this bureaucratic red tape soon becomes rooted in the system, and vested interests serve to maintain the status-quo.

   In most cases, border controls involve not only customs but also health and trade controls, all independent from one another and uncoordinated in the field. Consequently, many sets of documentation are required for trade department, customs and health declaration. Poor flow of information, and lack of reliable internet connection to facilitate electronic processing results in long paper trails, with intolerable delays and unnecessary additional costs to the business community. The direct effect on the container terminal is a congestion of yard space and freezing up of its container handling equipment capacity.

   c) **Inefficiency terminal operations**

   Poor labour relations, lack of skilled manpower and training, and safety awareness gave rise to poorly motivated workforce and low productivity. Inefficient operating procedures, lack of a proper Terminal Operating Software, leading to missing containers, or inability to locate containers, adds to long cycle time for a container move. In many of the African countries, it is not uncommon to find valuable yard space being occupied by long staying containers, that had overstayed for years, and the port is powerless to dispose of them.

   Port efficiency indicators show that African ports have room to improve their port operations considerably.


d) **Availability of handling equipment**

Many ports suffer from poor equipment maintenance, caused by a lack of maintenance mindset, shortage of spare parts, and cumbersome procurement procedures. Expensive equipment lies lost in the yard waiting for some spares which may just cost a few hundred dollars. Maintenance and repairs are carried only when equipment breaks down. Preventive and planned maintenance are almost non-existent or just given quick treatment. The port also finds it difficult to retain the talents and skilled technicians, given that it cannot pay a competitive salary as offered in the private sector.

For dedicated container terminals it is essential to operate (rail mounted) container gantry cranes.

e) **Container dwell time**

All the above mentioned factors together lead to unreasonably long dwell times of containers in the port, some as long as 30 days on average, from what should have been a norm of 5 to 7 days. Cargo owners not only have to live with the delays and disruptions to their production schedule, and high inventory cost, but also end up paying costly demurrage cost for stowage and container rental charges. High dwell time, leads to yard congestion, as containers keep piling up, which in turn prolongs the dwell time, and so continues the vicious cycle.

f) **Physical port infrastructure**

At present not many African ports are suited to receive container vessels of 8,000 TEU and more as the physical infrastructure (depth, length quay wall, etc.) is insufficient.

It is also noticed that there are in many countries no balanced master planning procedures put in place to develop ports and container terminals.

g) **Demand for container transport**

Despite the population size of the African continent, the demand for container transport services is relatively low, due to the overall economic development.

In addition, the container trade is very unbalanced, with containerized imports being much more than exports. This results in requiring to reposition empty containers, at an additional cost.

2  **Policy**

The objective of the policy for hub and feeder ports is to establish a regional network of hub and feeder ports in the 3 different regions of the African Sub-Saharan continent for containerized transport.

2.1 **Introduction**

The introduction of a hub and feeder port concept in Africa should have a positive impact on the overall transport logistic costs to African countries as it will enable the use of bigger (more cost-effective) container vessels for the long hauls to the hub ports, while smaller vessels are to be used to distribute the containers to the smaller feeder ports.
Moreover, it will improve and extend the connectivity of the African region to the rest of the world as the African container transport sector will become more efficient.

An upgrading of the container port network in Africa will also increase the opportunity to have safer and more secure transport of goods. In addition, the resulting rationalizing of trade flows will have a positive effect on the environment.

One of the principal bottlenecks with regard to container transport in African ports is the policy of the main shipping lines to introduce bigger container vessels on all trade lanes, including Africa. The economic justification of the introduction of bigger vessels, from the shipping line perspective, is the resulting lower slot costs.

In Africa only a very limited number of ports can expect to emerge as regional hub ports as long as they can attract more transshipment traffic. The absence of hub ports along the African coasts is one of the reasons for the high costs of maritime transport.

Other ports previously served on trunk maritime routes will become feeder ports, i.e. serviced by feeder services operating between regional hub ports and these feeder ports either in the same country or neighboring or nearby countries that do not have the level of traffic to become a regional hub port.

However, minimum requirements for hub ports and principal feeder ports in terms of infrastructure and equipment need to be defined. Moreover, one should always take into consideration the total overall transportation costs from origin to destination. The hub and feeder port concept will involve an additional handling (at the hub port) with related costs and should be offset with efficiency and cost gains in other sections of the transport chain.

### 2.2 Policy Framework

The primary objective of this section is to provide a policy framework for the development of hub and feeder ports in Sub-Saharan Africa.

1. Define minimum physical requirements of container terminals for the hub and feeder port concept.

   Based on the present sizes of container vessels, a decision should be made what container vessels have to be accepted for a) a hub port and b) a feeder port.

2. Define minimum requirements with regard to container port efficiency indicators.

   For the hub and feeder concept to work efficiently it is essential that the container terminals operate efficiently.

3. Introduce governmental incentives / tools to assist the private sector in developing hub and feeder terminals.

   The private sector will only invest in new container terminal capacity when it can recuperate its investment over the longer term. Political and economic stability is essential and governmental incentives (e.g. tax breaks, etc.) will accelerate the process.

4. Ensure transparency of port dues and tariffs for container shipping and handling.
Governments should ensure transparency and consistency of port dues. Port dues should be based on cost-recovery and ‘what the market can bear’.

5. Promote competition between container terminals.

Competition between container terminals will likely result in the usage of modern technology, better service levels and lower container handling tariffs. It should be noted that at the end the container shipping lines will take the decision via which ports the container are to be shipped.

2.3 Selection Criteria for a Hub Port

Sequential port call services can be partially replaced through the insertion of a transhipment hub. These hubs usually have several advantages attracting maritime shipping companies to configure their service network, namely with interlining and hub-and-feeder configurations. The selection of a port to act as a transhipment hub is based on a set of considerations:

Location:
The location of a transhipment hub is essential for its potential. A transhipment hub should be located close to major shipping lanes and relatively close to the market (consumers).

Infrastructure:
Transhipment hubs tend to have greater depth since they were built recently in view to accommodate modern containership drafts, placing them at a technical advantage over many older ports with more constraining settings. Their selection often involves the consideration of growing containership drafts and the future capacity, in terms of transhipment and warehousing, of the hub to accommodate such growth. About 13.5 meters (45 feet) is considered a minimal requirement to be an effective deep-sea transhipment hub. The sites of intermediate hub terminals tend to be less crowded and outside the traditional coastal areas that have seen a large accumulation of economic activities. This is supportive in the setting of large yard areas that are important to accommodate transhipment activities since few containers are leaving the terminal. They often have land for future expansion, which is a positive factor to help securing existing and future traffic.

Operations:
Since transhipment is an activity that does not add any value to the cargo, costs and productivity factors are highly important. Operation costs for transhipment hubs in developing countries tend to be lower, in part due to lower labour costs, particularly if it concerns a new terminal facility. Transhipment costs of $100 per box are considered to be within an acceptable range. Costs below $100 improve the competitiveness of the transhipment hub. Ships tend to spend as little time as possible at the hub (turnaround time), thus the necessity of a high level of productivity for the terminal equipment. An average of 35-40 moves per hour per crane is considered a desired level of productivity, but standards are aiming towards 60 moves. Most terminals are owned (concessioned), in whole or in part, by a global terminal operator (often a single one) which are efficiently using these
facilities and have flexibility in deciding future terminal developments. Transhipment hubs are avoiding a governance legacy of public port authorities. They thus tend to be responsive and adaptable to market changes.

Since the transhipment business remains highly volatile, transhipment hubs can eventually develop services that add value to the cargo instead of simply moving containers between vessels. This strategy could trigger the creation of logistics zones within or in the vicinity of the port area, in many cases implemented as a Free Trade Zone. This potential capture of added value can help improve the competitiveness of a transhipment hub in view of a general footlessness of transhipment traffic.

Not all port systems feature transhipment hub development. In the United States, shipping regulations gravitating around the Jones Act have favoured a process of port system development with limited (feeder) services between US ports and the absence of US-based transhipment hubs (Freeport in the Caribbean to a limited extent takes up this role). Instead, the US port systems at the east and west coast are characterized by a strong inland orientation supported by extensive double-stack rail services, local and long-distance trucking and limited barging.

Port investment should not be just about the development of deep water mega ports, but should instead be based on achieving balanced development in the various regions of the African continent. Governmental support and master planning is key to facilitating the setting up of an integrated network of feeder ports, inland ports and an intermodal corridor system. The decision process to site inland port should best be left to the technocrats, and the private sector to evaluate, instead of being hijacked by politicians as a part of the vote canvassing campaign, and pork barrel politics. Private sector involvement is therefore one safeguard in ensuring that decisions are made on a sound, commercial, and market oriented basis, with risks and rewards going hand in hand to the parties involved.

The following criteria are to be taken into consideration for defining the hub and feeder ports:

- Terminal characteristics/operations
- Container market potential
- Terminal expansion possibilities
- Availability and quality of hinterland connections: road, rail and inland waterways
- Availability of inland container deports/dry ports/multimodal centres
- Total user costs
- Distance of port to container shipping trunk routes and non-African principal transhipment hubs
- Principal Port Efficiency Indicators (PEIs)
- Total costs for development of the Hub Port
3 Guidelines

This section provides a set of instructions with required information and tools, incl. investments, regulations and institutional framework in order to establish hub and feeder ports for the African Sub-Saharan region.

The objective of the guidelines is to make a balanced choice for selecting hub and feeder ports per African sub-region (East, South and West Africa).

The following activities have to be carried out to make an unbiased choice of hub and feeder ports.

3.1 Present Container Terminals per African Region

Identify present container terminals per African region and prepare an inventory of all container terminal development plans (with details of the planned physical infrastructure – quay length, depth and yard space).

3.2 Terminal Characteristics and Operations

Define the minimum physical terminal characteristics (berths length, depth alongside, yard space for both hub and feeder ports and the operational requirements.

It is advised to have hub ports which are able to receive container vessels with a minimum capacity of 8,000 TEU, but preferably able to receive 10,000 TEU vessels.

Hub ports are advised be able to receive container vessels with a capacity of 3,000 TEU.

Prepare a ranking of container terminals based on maximum theoretic capacity (calculated on basis of berth length, depth alongside, ship-to-shore crane capacity and container yard space).

3.3 Container Market

Identify the present and future container market for all container terminals in the the 3 different African regions.

The container market consists of local, international and (potentially) transhipment cargo.

For the determination of the future container market, different possible scenarios should be developed (e.g. high economic development of the African continent, global recession) and an assessment of the consequences for the container transport market prepared.

Prepare a ranking of container terminals for present and future (10 years) container projections.

3.4 Terminal Expansion and Green Field Development Plans

Identify present container terminal expansion and green field development plans and prepare an overview of the physical characteristics of those projects and costs for the container terminal part.

Identify the phase of development those plans are and make an assessment how realistic the plans are (based on the phase the plans are).
3.5 Availability and quality of hinterland connections: road, rail and inland waterways

Identify the availability of the hinterland connections (rail, road and inland waterways) per container terminal and prepare an assessment of the capacity (max. TEU per day).

Prepare a ranking per port of the maximum hinterland connection capacity.

3.6 Availability of inland container deports/dry ports/multimodal centres

Identify the present availability of container storage possibilities in the close neighbourhood (max. 10 km.) of the container terminal and the theoretical maximum capacities of those sites.

This criterion shows the maturity of the container transportation market at a certain port.

Prepare a ranking per port of the maximum theoretical capacity of inland container deports/dry ports/multimodal centres.

3.7 Total user costs

Identify per container terminal the total user costs and prepare a cost ranking of all ports with container terminals.

Port user costs should include:

- port approach
- port/terminal dues,
- handling rates
- costs for preparing documentation and administration charges
- storage costs (on terminal)
- hinterland transport costs.

The costs should be calculated towards a total per TEU.

Prepare a ranking of total user costs per port.

The lower the total use costs, the better for the hub and feeder concept.

3.8 Location of port to container shipping trunk routes and non-African principal transhipment hubs

Identify per port with a container terminal the distance to the major global shipping lanes and non-African principal transhipment hubs.

The following figure shows the major shipping lanes.
The non-African principal transhipment hubs to be taken into consideration:

- Salalah (Oman)
- Djibouti
- Tanger (Morocco)

Prepare a ranking per port based on the lowest distance to the closest non-African principal transhipment hub.

3.9 Principal Port Efficiency Indicators (PEIs)

Identify per port the principal port efficiency indicators and prepare a ranking based on those indicators.

The principal port efficiency indicators are:

- average port charge per throughput TEU
- average ship discharge and loading rate (TEU per crane per hour)
- average Customs clearance time (days)

Prepare a ranking per port of the PEI’s.

3.10 Total Costs for Development of the Hub Port

Identify the total costs required to develop a certain container terminal to a hub terminal.

Prepare a ranking based on the lowest total costs required.

3.11 Multi Criteria Analysis

A Multi-Criteria Analysis (MCA) on the above mentioned criteria should be applied.

The weighting of each criterion should be defined (each criterion the same weighting; or a weighing based on the relative importance of each criteria)
**BOX: FAILURE STORY**

**Container Terminal Amsterdam**

In 2001 an innovative designed container terminal was commissioned in Amsterdam. The indented terminal was the first container terminal were vessels could be discharged and loaded on both sides. With this terminal, Amsterdam wanted to challenge Rotterdam to become a major container hub in the Hamburg – le Havre range. Total investment in the terminal was 171.5 m.€, of which the City of Amsterdam furnished about 75% (infrastructure and partly cranes). USA-based Ceres Terminals was the first operator and invested 43.5 m.€, later Japanese logistics operator NYK took over the operations and finally Hutchinson tried to make a success of the terminal. They all failed as it was found impossible to attract a vast amount of shipping lines to service Amsterdam.

In despite of the unique design with a very high TUE discharging rate, due to the many cranes that could be used, the terminal had disadvantages (locks, long approach channel) which did not offset the high productivity.

**BOX: SUCCESSFUL STORY**

**Container Terminal Tangier**

The container terminal of Tangier in Morocco was developed as a principal transhipment hub for the Mediterranean region. The home market for the terminal is relatively low, but due to its location near the Western entrance of the Mediterranean Sea, close to a principal East-West shipping lane, the terminal was able to attract a lot of transhipment containers. In 2015, Tangier handled over 3 million TEU and is ranked 2nd container port of Africa.
MODULE 14 RAILWAYS: A COMPETITIVE MODE OF TRANSPORT & RAILWAYS CONCESSION IN SUB-SAHARAN COUNTRIES

Module 14.1 A Competitive Mode of Transport
By Robert Munjanganja

Table of Contents

Abbreviations and Acronyms ....................................................................................................... 2
1 Introduction ........................................................................................................................................ 3
  1.1 Competitive advantage of railways over other mode/road ......................................... 3
  1.2 The Challenges of Providing Competitive Railway Service ......................................... 4
2 Lessons from SADC and EAC .............................................................................................. 6
  2.1 The complexity of Investment decisions on SSA Railways ......................................... 6
3 Competitiveness of Regional Economic Communities (RECs) Railways ............................ 7
  3.1 West African States (ECOWAS) Railways .................................................................. 7
  3.2 East African Community Railways ............................................................................... 8
  3.3 Southern African Development Community (SADC) railways ................................. 8
  3.4 Comparison of other RECs to SADC ........................................................................... 8
  3.5 Lessons from the SADC Region .................................................................................... 9
    3.5.1 SARA as a Case Study for Integrated Regional Rail Competitiveness .......... 9
    3.5.2 SARA Strategic Focus Areas .................................................................................. 9
4 Conclusion and Recommendations .................................................................................... 12
  4.1 Conclusion ..................................................................................................................... 12
  4.2 Recommendations ......................................................................................................... 12
5 References .................................................................................................................................. 14
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AFDB</td>
<td>AFRICAN DEVELOPMENT BANK</td>
</tr>
<tr>
<td>ATF</td>
<td>AFRICAN TRANSPORT FORUM</td>
</tr>
<tr>
<td>AU</td>
<td>AFRICAN UNION</td>
</tr>
<tr>
<td>BBR</td>
<td>BEITBRIDGE BULAWAYO RAILWAYS</td>
</tr>
<tr>
<td>BR</td>
<td>BOTSWANA RAILWAYS</td>
</tr>
<tr>
<td>CFM</td>
<td>COMINHOES DE FERRO DE MOZAMBIQUE (MOZAMBIQUE PORTS AND RAILWAYS)</td>
</tr>
<tr>
<td>DBSA</td>
<td>DEVELOPMENT BANK OF SOUTHERN AFRICA</td>
</tr>
<tr>
<td>IBD</td>
<td>INTERNATIONAL COMPETITIVE BIDDING</td>
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<td>INTERNATIONAL FINANCE INSTITUTIONS</td>
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<td>IMF</td>
<td>INTERNATIONAL MONETARY FUND</td>
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<td>RA</td>
<td>RAILWAY ADMINISTRATION</td>
</tr>
<tr>
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<td>RAILWAY SYSTEM ZAMBIA</td>
</tr>
<tr>
<td>RVR</td>
<td>RIFT VALLEY RAILWAYS</td>
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<td>SADC</td>
<td>SOUTHERN AFRICA DEVELOPMENT COMMUNITY</td>
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<td>SOUTHERN AFRICA RAILWAYS ASSOCIATION</td>
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<td>SMS</td>
<td>SAFETY MANAGEMENT SYSTEM</td>
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<td>SSA</td>
<td>SUB-SAHARAN AFRICA</td>
</tr>
<tr>
<td>TZL</td>
<td>TANZANIA RAILWAYS LIMITED</td>
</tr>
<tr>
<td>WB</td>
<td>WORLD BANK</td>
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<tr>
<td>WBG</td>
<td>WORLD BANK GROUP</td>
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1 Introduction

Table 1: List of Main railways in Sub-Saharan Africa

<table>
<thead>
<tr>
<th>Countries</th>
<th>RAILWAY ORG</th>
<th>OWNERSHIP</th>
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<td><strong>West Africa</strong></td>
<td></td>
<td></td>
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<tr>
<td>Burkina Faso/Côte d’Ivoire</td>
<td>Sitarail</td>
<td>Concessionaire</td>
</tr>
<tr>
<td>Mali/Senegal</td>
<td>Transrail</td>
<td>Concessionaire</td>
</tr>
<tr>
<td>Togo</td>
<td>Canac; WACEM</td>
<td>Concessionaire</td>
</tr>
<tr>
<td><strong>Central Africa</strong></td>
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<td></td>
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<tr>
<td>Cameroon</td>
<td>Camrail</td>
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</tr>
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<td>DRC Congo</td>
<td>SizaRail</td>
<td>Concessionaire</td>
</tr>
<tr>
<td>Gabon</td>
<td>Transgabonaise Setrag</td>
<td>Concessionaire</td>
</tr>
<tr>
<td><strong>East Africa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya/Uganda</td>
<td>RVRC</td>
<td>Concessionaire</td>
</tr>
<tr>
<td>Tanzania</td>
<td>TRL</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Southern Africa</strong></td>
<td></td>
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</tr>
<tr>
<td>Angola</td>
<td>CFB</td>
<td>Public</td>
</tr>
<tr>
<td>Angola</td>
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</tr>
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<tr>
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<td>Madagascar</td>
<td>MADARAIL</td>
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<td>CFM</td>
<td>Public</td>
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<tr>
<td>Mozambique</td>
<td>CDN</td>
<td>Concessionaire</td>
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<tr>
<td>Malawi</td>
<td>CEAR/CDN</td>
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<td>South Africa</td>
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<td>Public</td>
</tr>
<tr>
<td>Swaziland</td>
<td>SR</td>
<td>Public</td>
</tr>
<tr>
<td>Tanzania</td>
<td>TAZARA</td>
<td>Public</td>
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<tr>
<td>Zambia</td>
<td>ZRL</td>
<td>Public</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>NRZ</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Zimbabwe</strong></td>
<td>BBR</td>
<td>Concessionaire</td>
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</table>

Source: Updated/ Data collected from companies, di Borgo and others (2006).

1.1 Competitive advantage of railways over other mode/road

Railways are usually more energy efficient than road transport and much more environmentally friendly because they have lower emissions per traffic unit (passenger/kilometre or ton/kilometre) than any other. Beyond energy efficiency, transport by inland rail can also achieve significant economies of scale in that a single rail train (locomotives + wagons or carriages) can move many tons of freight or passengers at once, making it operationally highly efficient when there are enough volumes. Railways are ideal to transport high volumes of bulk commodities or passengers; Zamfir, (2016).

Since efficiently run railways can provide an inexpensive means of transporting high volumes of freight and passengers, low transport costs improve the competitive positions of shippers and entire economies.
Railways generally also have a much smaller land requirement for right-of-way than highway transport. Although railway freight lines generally require lower gradients and more gentle curves than road transport, which increases rail circuitry in mountainous terrain, railways usually have a much smaller environmental and land use foot-print than road transport and often require substantially less investment per kilometre than water or road transport with equivalent capacity (Zamfir, 2016).

Other competitive advantages of rail are:

- Can offer a borderless service for cross border traffic.
- Safer than the road mode albeit slower.
- Not susceptible to hi-jacks.
- Price will always be better the higher the volume and the greater the distance (tapering effect)

### 1.2 The Challenges of Providing Competitive Railway Service

Before discussing the challenges of what need(s) to be done to make railways a competitive mode of transport, it is important to appreciate the basis of what constitutes a competitive advantage in the railway sector. These include but are not limited to:

- **Economies of Scale:**
  - Capacity - high volumes - bulk commodities
  - Long distance - the longer the more cost effective
  - Line density - meaning volume of traffic carried per kilometer of rail

- **Infrastructure connectivity,** that is generic technology – in terms of line gauge, rolling stock, long distance and across borders-corridor freight-interoperability

- **Domestic/international market** – facilitation of intermodal freight-long distance bulk for rail, and light and short distance freight especially fast moving consumer goods and perishables for road.
Sadly, despite the high fuel prices, traffic congestion, and greenhouse gas emissions, by road transport, the railway sector in Africa has failed to achieve a competitive advantage in the transport industry. According to Vilardell, (2015)\textsuperscript{1}, lack of maintenance has been one of the main reasons why some African railways have lost their original capacity. He went on to demonstrate loss of capacity on selected SSA railways, as shown in Figure 1 below:

\textbf{Figure 1. Loss of capacity on some African railways}


The figure 1 above shows that on average some railways in SSA excluding South Africa (Transnet), Namibia (TransNamib), Botswana (BR), Kenya/Uganda (RVR), Cameroon (Camrail), Mali/Senegal (Transrail) etc. have lost 82% of their original capacity due to lack of maintenance. Therefore, most railways except a few, in SSA are operating at less than 20% of their original carrying capacity. The overall quality of most railway infrastructure and rolling stock in SSA is dilapidated, insufficient and in very poor condition, thereby hindering the optimum performance and subsequently the competitive advantage of the railways.

\textsuperscript{1}Joan Miguel Vilardell, Advanced Logistics Group, SAU (ADFB-ATF, 2015)
2 Lessons from SADC and EAC

In order to effectively elevate the AU’s cause of, “promoting efficient rail based trans-boundary transport corridors, as enablers for regional, continental, as well as international integration and trade facilitation”, it is necessary to consider the complexity of different levels of investment required especially in railways:

2.1 The complexity of Investment decisions on SSA Railways

It has been argued by Vilardell J.M.: Advanced Logistics Group (2015) that “Adequate financial provisions for maintenance is critical to sustain capacity and service reliability; the lack of which, has been one of the main reasons some African railways have lost their original capacity”, and competitiveness. In addition to Vilardell’s sentiment, investment in the railway sector of SSA should be targeted at different levels. This is to ensure the railways maintain sustainable operations, while providing capacity ahead of demand. Currently SSA railways suffer from cumbersome bureaucracy and a rudimentary approach to investment. As such, it is necessary for SSA railways to plan ahead in order to keep operational, while obtaining a competitive advantage. In terms of capacitating public railways to match capacity to demand, a railway infrastructure intervention pyramid is recommended. The pyramid will assist railways to target specific competitive advantages by identifying not only feasible, but also practical investment options and equally determining the source and level thereof (figure 3).

Figure 2. Railway Infrastructure Intervention Pyramid
Source: Transnet Railway Infrastructure Interventions (2013)

Figure 2 above, proposes logical ways to address different levels and magnitude of interventions to increase railway capacity, such as:

- manage and maintain the business (e.g. removal of speed restrictions through hot spot removal);
• rehabilitate or acquire rolling stock and other non-fixed infrastructure interventions (e.g. maintenance equipment and loading/unloading facilities)
• railway operating interventions (e.g. optimisation of slot utilisation - block trains)

The above, which is by no means an exhaustive list, will ensure sustainable rail transport service is achieved relative to freight demand and customer supply chain requirements. The above figure further, highlights railway interventions related to cost and effort providing typical examples for each layer. According to the bottom two layers of the pyramid, “Operational and Asset Management/Control”, such an activity requires small to moderate investment and is capable of being sourced from the national treasury or concession fees thereby enabling railways to maintain efficient performance for the traffic on offer without looking for external funding. The top two layers concerning infrastructure, require strategic thinking and are necessitated by an increase in demand. Naturally, any infrastructural development requires large and significant investment only possible through private external borrowing. This will in turn create an opportunity for the private partnerships within the sector due to the anticipated volumes and returns.

3 Competitiveness of Regional Economic Communities (RECs) Railways

3.1 West African States (ECOWAS) Railways

The Economic Community of West African States (ECOWAS) is made up of fifteen member countries that are located in the Western African region. Unlike the situation in Southern Africa, there is no real regional rail network in the ECOWAS area, nor are the rail gauges internally compatible. In fact, the national rail networks of ECOWAS’s member states are mostly disconnected from each other due to multiple rail gauges. Most francophone countries’ rails are 1,000 mm wide, but Ghanaian and Nigerian rails are 1,067 mm wide, while Guinea and Liberia use the standard 1,435 mm width. Plans are under way however, for a coastal rail line project, which would help to connect the entire region, because since 2009, ECOWAS has been pushing for interconnection of the rail networks that exist in 11 of its 15 member states.

The new tracks being laid from Niamey will connect to an existing sub-network in neighbouring Benin. That segment is part of a bigger West African rail track project that will loop back to Abidjan with the addition of a coastal rail line running through Cotonou (Benin), Badagry (Nigeria), Lomé (Togo) and Accra (Ghana). For these projects the private sector is invited to invest under build, operate and transfer (BOT) arrangements. Once the coastal rail line is completed, the whole network will be 3,000 km with 1,200 km of new track, in addition to the existing 1,800, which are to be rehabilitated. Other countries in the region are looking at similar BOT arrangements to finance missing links such as the coastal rail line linking Côte d’Ivoire to Nigeria. The coastal rail line project carries hope for the entire region.

However, because of lack of interconnectivity and integration of West Africa’s rail systems, it is rather difficult to review and assess the competitiveness of these railways on an REC and transboundary basis. Suffice it to say that road remains the only option for cross border transportation.

The above situation in West Africa, is in contrast to Southern Africa, where interconnected national railway systems form a regional railway network that spans half a dozen countries and
extends from the Southern part of the Democratic Republic of the Congo, as well as from Tanzania all the way to South African and Mozambican Ports and vice-versa to Dar e Salaam in Tanzania.

3.2 East African Community Railways

The East African Community (EAC) is made up of five Member States, comprising Burundi, Kenya, Rwanda, Tanzania and Uganda. EAC is the smallest of the three SSA RECs. It is important to note that EAC and SADC are heterogeneous when looked at in terms of geographical size, levels of regional railway development and initiatives established to develop their railway networks. Already EAC and SADC are engaged in a cooperation framework under the auspices of the Tripartite Free Trade Area regional infrastructure programme. A key objective of the tripartite infrastructure programme amongst COMESA, EAC and SADC is to harmonise and coordinate efforts of national, regional and continental transport and trade facilitation.

The EAC acknowledges the need to rationalise rail development within the region and to harmonise road and rail transport operations along the main corridors and has therefore, prepared an East African Railways Master Plan to guide the future development of the railway services in the region. Railway transport is the second most important mode of transport after road and critical for long distance freight along the main transport corridors. However, the poor rail infrastructure and equipment condition, makes rail transport lag behind road, with the exception of the Kenya/Uganda RVR concession, which is performing reasonably well, accounting for about 40% of the long distance cross-border transportation of cargo.

Nevertheless, efforts have been taken and the railway lines are being revamped, -Tanzania (Central Corridor) is a case in point-which would lead to an increase in rail competitiveness. This is being facilitated by both the World Bank and the African Development Bank, which have committed funds for the development of the rail infrastructure.

3.3 Southern African Development Community (SADC) railways

SADC comprises of 15 Members States, six of whose railway systems are interconnected and have a similar gauge throughout.

3.4 Comparison of other RECs to SADC

SADC has provided the lesson that not only should governments privatise/concession their railways as a way of improving competitiveness, but also that governments are capable of establishing strong and efficient national institutions that can manage railways better than private concessions as has been proven by both Transnet Freight Rail (TFR) and Botswana Railways(BR). This could be a point of reference for other RECs in EAC, CAC and ECOWAS.

SADC’s transport corridor development concept is well advanced in its implementation, which could also provide a good enough lesson, which provides for a mechanism to coordinate Member States’ efforts. Most importantly, it provides for development of transport infrastructure in the entire SADC region, as compared to the EAC where the transport corridor concept has concentrated more on trade facilitation aspects with less emphasises on rehabilitation of regional integrated physical transport infrastructure. SADC programmes are implemented in a more coordinated and phased manner through the Regional Indicative Strategic Development Plan (RISDP) framework. Further, SADC has a more elaborate and more coordinated institutional
mechanism at both national and regional levels. It has operationalised its corridor transport strategic objectives by creating the SADC Protocol on Transport, Communication and Metrology (2012), which sets procedures of establishing Southern African Railways Association (SARA), which is made up of the Chief Executives of all the regional railways as core members, and selected industry stakeholders as associate members.

As an institution, with a secretariat, SARA focuses on rail related issues, such as, railway policy and regulatory guidelines, operational efficiency of rail corridors, interchange and fair competition between rail and road transport, as well as promoting and obtaining an integrated and efficient rail transport system for the region.

3.5 Lessons from the SADC Region

Despite SADC facing similar challenges as those faced by other RECs in SSA, in developing its railways, the establishment of SARA, could be used as a bench mark in the drafting of procedures, policies and standards guidelines required to create an effective and efficient integrated cross-border railway transport system in the RECs.

3.5.1 SARA as a Case Study for Integrated Regional Rail Competitiveness

At its formation, SARA was to originally provide the SADC railways with a strong lobbying voice and to pursue advocacy for fair surface transport competition, which was to be achieved through “levelling of the playing field” between road and rail in terms of both policy and regulatory regimes. Modal equity was to be achieved by enforcing the User Pays Principle, where road transport should pay the full cost of road infrastructure or where infrastructure support to Railways should be given by Governments. The SADC Protocol on Transport, Communications and Meteorology (PTCM), Article 13.13, (2012), mandates the formation of a Regional Association for each transport mode. It formalised the existence of SARA (for the railways), and provided a platform for interaction amongst the different bodies as well as with the other stakeholders in their respective modes of transport or sub sectors, with the view to come up with an integrated transport system in SADC. The mandate of SARA is defined in Article 7 of the SADC Protocol on Transport, Communications and Meteorology (2012). Members of SARA are predominantly all railway Executives in the region, with some major railway customers and suppliers as well as other organisations with special interest in railways, as associate members.

3.5.2 SARA Strategic Focus Areas

SARA focuses on the following main areas:

Advocacy and Lobbying

The advocacy agenda pursues funding issues, surface policy equity between road and rail, and creation of an appropriate institutional framework for the transport industry.

Infrastructure Development

The infrastructure development includes the generation of additional track capacity through elimination of missing links and upgrading of existing networks.
Railway Operations

The main thrust of this strategic focus area is that railways are to be competitive with other surface modes of transport. It involves the alignment of railway operations to be efficient, safe, cost effective, predictable and seamless. This will be achieved through optimal utilisation of resources supported by standardisation and harmonisation of equipment and policies - through agreed standards guidelines.

Resource Mobilisation and sharing

Mobilisation of resources ensures provision of adequate capacity for the Association, to enable it to effectively execute its mandate within a dynamic business environment. Maintenance and rehabilitation of rolling stock is a pre-requisite for meeting growing demand. The resultant effect is expected to be improved services and railway market share. SARA members who are rail transport operators have agreed to share resources by allowing the working of locomotives and crews across borders. In addition, SARA members have in place a mechanism to assist each other during major accidents that would occur occasionally, they will provide breakdown equipment and personnel to the other railway to ensure speedy recovery and opening of the blocked line.

Marketing and Publicity

Effective projection of SARA will create the much needed economic space and stakeholder support for railways.

Safety

Management of safety and environmental aspects of railway business imposes additional obligations on the part of railways and has positive effects on service delivery and corporate citizenry.

Some of the specific notable milestones and achievements of SARA were, the successful lobbying for a clear positive policy shift towards railway infrastructure development and maintenance, when the SADC Ministers of Transport decided to create Rail Funds, and waiver road fuel levies on fuel consumed by railway locomotives. An exemption from paying such levies increases the working capital for railways. The Brazzaville Declaration of April 2006, adopted by the Union of African Railways in the Republic of Congo, advocating for the construction of standard gauge railways along RECs, and replacement of existing narrow/cape gauge networks with standard gauge, where possible, as a means of increasing carrying capacity, interconnectivity and operability of RECs railways, so as to be competitive; has been the reference point for railway infrastructure development and operations guidelines on which SARA has leveraged its lobbying and advocacy.

To facilitate cross border railways interoperability, the following Regional Safety Standards have been developed:

i. SARA 001: Railway Safety Management (this standard)

ii. SARA 002: Technical requirements for engineering and operational standards – General.

iii. SARA 003: Technical requirements for engineering and operational standards – Track, civil and electrical infrastructure.
iv. SARA 004: Technical requirements for engineering and operational standards – Rolling stock.

v. SARA 005: Human Factors Management

vi. SARA 006: Technical requirements for engineering and operational standards - Track, civil and electrical infrastructure- Level crossings

vii. SARA 007: Technical requirements for engineering and operational standards – Operational principles for safe movement on Rail

viii. SARA 008: Requirements for systemic engineering and operational safety standards – Train authorization and control, and telecommunication

ix. SARA 009: Technical Requirements for engineering and operational standards – Interface and intraface management, and interoperability

In developing the above standards, references were made to “relevant national legislation” and in these instances; the specific national legislation would depend on the country in which the Railway Administrator (RA) operates in. Where there is no relevant national legislation, best practices shall prevail.

**Other Regional Harmonised Texts**

To ensure safe handling of Rolling Stock (wagons) at borders (Interchange points), SARA developed two (2) procedures namely “the Handling of Interchange Rolling Stock” for wagons’ inspection and “the Control of over Loading” for loads’ inspection.

**The Handling of Interchange Rolling Stock**

The procedure manual states that each Railway shall undertake essential Fair, Wear and Tear maintenance on foreign vehicles while on their lines. Items replaced as a result of Fair, Wear and Tear should remain fitted and the owning Railway should be charged with the cost of material and labour of fitting. The Fair, Wear and Tear maintenance shall be charged to the owning Railway in accordance with the agreed cost schedules. The procedure also covers other repairs other than the Fair Wear and Tear, maintenance costs and Standards for minimum acceptable condition for equipment that most frequently works across borders such as wagons at Interchange Stations.

**Procedures for the Control of Over Loading**

The purpose of to ensure that wagons are loaded in a manner that is safe for transportation from origin to destination. Compliance with the requirements and recommendations of the Procedures will provide a significant level of uniformity in loading practices and procedures used on the interstate network, providing a greater level of confidence and acceptance of loads by rail operators and access providers.

**The Resource Sharing & Costing Framework**

SARA recognizes in its Constitution (Purpose of the Association) the necessity of the free movement of Rolling Stock and other moving equipment on whatever network in the SADC region regardless of the ownership so long as a seamless, efficient, predictable, cost-effective, safe and environmentally-friendly railway service is provided to the customers. The sharing of the Rolling Stock and Infrastructure equipment in the Southern Africa region is made imperative by the following reasons:
The interconnectivity existing between the networks hence the natural business between contiguous Railways, business which has led to current bilateral Business and Technical Agreements, which at their turn require now to be unified for the common use all over the region.

The importance of the demand for rolling stock, is so high that the resource bases of the various Railways in the region are depleted, making it imperative for some Railway Administrations to hire resources from others.

Some of the Railway Equipment is very expensive and only used occasionally, making it uneconomic for every Railway Administration to own the equipment, for example tamping machines and breakdown cranes.

Trade between the countries and imports to and exports from landlocked countries create demand for a cross-border transportation service, necessitating the movement of rolling stock across borders.

The ICT projects that SARA is currently working on, such as the Radio Frequency Identity Tagging (RFID) and the Regional Commercial Information Sharing (RCIS) are expected to enable the tracking of shared wagons across networks in the region.

4 Conclusion and Recommendations

4.1 Conclusion

There are quite a number of initiatives that can be adopted and implemented in each REC to place railways on a competitive advantage against other surface modes of transport. The role of the RECs in this respect, includes but not limited to: harmonisation and coordination of trans-boundary transport initiatives, promotion of trade facilitation through efficient and seamless transport services free of unnecessary bottlenecks, encourage member states to adopt and support integrated regional transport corridor concept, as well as encouraging and ensuring standardisation of regional railway policies and regulatory guidelines for safe and interoperable cross-border railway operations.

The initiatives mentioned above, are among some of the issues agreed upon and spearheaded by COMESA, EAC and SADC through the tripartite free trade area and regional railways infrastructure programme, as well as facilitating information sharing, experiences, best practices etc.

4.2 Recommendations

Some of the recommendations are imbedded in the main report (e.g. Table 2). However, the following are other recommendations for rail competitiveness: It is argued that, all the railways do perform reasonably well within their own countries, regardless of the condition of the infrastructure and rolling stock. However, the challenge of competitiveness, comes in when dealing with the transportation of cross-border commodities (imports and exports), which means that the performance of each railway in the same corridor, is negatively or positively dependent upon the performance of the other railways in the corridor i.e. interoperability and connectivity as well as quality of service. This is because, to the importer/exporter using rail transport, rail is considered from origin to destination as per their/his consignment note, and not as an individual
railway operator, for example, Transnet (South Africa), NRZ (Zimbabwe), ZRL (Zambia), SNCC (DRC), for cargo from Durban, destined for the DRC – Congo. The efficiency and therefore competitiveness of the railways is judged on that single throughout journey by RAIL.

In terms of capacitating public railways to match capacity to demand, a railway infrastructure intervention pyramid is recommended. The pyramid will assist railways to target specific competitive advantages by identifying not only feasible, but also practical investment options and equally determining the source and level thereof (figure 3). These recommendations should be further supported by:

i. Each REC set up an Association that oversees the railway sector, by facilitating the development of regional initiatives that improve rail competitiveness over other surface transport modes. The Association will lobby governments through the RECs for railways for development of regional Rail Fund, based on the concept of the Congo Brazzaville and exemptions of fuel road levies. Develop regional standards and procedures for efficient, cost effective, seamless transport services

ii. There is need to lobby for liberalization of the rail sector to improve performance and attract investors in the rail sector

iii. Adopt the corridor transport management principle, to improve cooperation between railways for trans-boundary traffic. The concept of Join Operating Centre (JOC) that SARA has adopted is bringing about efficiency in some corridors. In other words, JOCs, are a-one-stop Operations Management Centres (OMCs), situated at an agreed location in a REC corridor, at which all the concerned railway operations staff, work from; to ensure collaboration and efficient communication, resource allocation, and effective railway operations of the common corridor, and solve problems real time. This has been found to work very efficiently and effectively between Transnet (South Africa) and CFM (S) Mozambique Railways, on the Maputo corridor, where the two operators’ staff are working from the same operations control centre in Maputo.

iv. To improve competitiveness, the railways need to invest in Information and Communication Technologies for cargo tracking and facilitation of cross border train monitoring and feedback to customers. For example, the ICT projects that SARA is currently working on, such as the Radio Frequency Identity Tagging (RFID) and the Regional Commercial Information Sharing (RCIS) are expected to enable the real time tracking of shared wagons carrying cargo across networks in the region

v. Develop and implement regional standards in railway safety, technical and operations to promote harmonization of operations interoperability

vi. Minimise the incidence of load shifts and the subsequent delays to trains and the delivery of goods - including intermodal collaboration- thereby increasing train performance and reducing costs.

vii. Significantly reduce the risk of adverse dynamic performance and the derailment potential of vehicles due to overloading, uneven load distribution, and over
speeding thus reducing maintenance costs and potential recovery and reparation costs.

viii. Reduce the risk of injury to persons and damage to loads, rolling stock and infrastructure.
5 References

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List Figures and Tables:

Figure 1: Loss of capacity on some African railways

Figure 2: Railway Infrastructure Intervention Pyramid

Figure 3: Musina/Beit Bridge rail/road Border Post: South Africa/Zimbabwe

Figure 4: Source Internet: Congestion at Mesina/Beitbridge road Board post from the South African side

Table 1. List of railways in SSA

Table 2: Trans-boundary Railway inefficiencies and what to do to be competitive
MODULE 14 RAILWAYS: A COMPETITIVE MODE OF TRANSPORT & RAILWAYS CONCESSION IN SUB-SAHARAN COUNTRIES

Module 14.2 Railway Concessions in Sub-Saharan Africa

By Robert Munjanganja

Table of Contents
Acronyms ........................................................................................................................................... 2
Africa Map of Concessions ................................................................................................................ 3
1 Introduction ..................................................................................................................................... 4
2 Overview of Global Trends ............................................................................................................ 4
3 The Reforms .................................................................................................................................. 4
  3.1 Concession ............................................................................................................................... 6
    3.1.1 Overview of Railway Concession ..................................................................................... 6
    3.1.2 Railway Concessions in Sub-Saharan Africa ................................................................. 7
    3.1.3 Successes of Railway Concessions in SSA ................................................................. 8
    3.1.4 Challenges of concessions ......................................................................................... 10
    3.1.5 Lessons Learned ....................................................................................................... 13
4 Conclusion and Recommendations ............................................................................................. 15
  4.1 Conclusion ............................................................................................................................... 15
  4.2 Recommendations ................................................................................................................. 15
5 References .................................................................................................................................... 18
6 Annex ........................................................................................................................................... 20
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AFDB</td>
<td>African Development Bank</td>
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<td>ATF</td>
<td>African Transport Forum</td>
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<td>AU</td>
<td>African Union</td>
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<tr>
<td>BBR</td>
<td>Beit bridge Bulawayo Railways</td>
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<tr>
<td>BR</td>
<td>Botswana Railways</td>
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<tr>
<td>CFM</td>
<td>Cominhes de Ferro de Mozambique (Mozambique Ports and Railways)</td>
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<tr>
<td>DBSA</td>
<td>Development Bank of Southern Africa</td>
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<tr>
<td>GOZ</td>
<td>Government of Zimbabwe</td>
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<tr>
<td>IBD</td>
<td>International Competitive Bidding</td>
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<td>IFI</td>
<td>International Finance Institutions</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>NLPI</td>
<td>New Limpopo Investments</td>
</tr>
<tr>
<td>PE</td>
<td>Public Enterprises</td>
</tr>
<tr>
<td>PPPs</td>
<td>Private Public Partnerships</td>
</tr>
<tr>
<td>RSZ</td>
<td>Railway Systems of Zambia</td>
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<tr>
<td>RVR</td>
<td>Rift Valley Railways</td>
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<td>SADC</td>
<td>Southern Africa Development Community</td>
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<tr>
<td>SAP</td>
<td>Structural Adjustment Programme</td>
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<td>SARA</td>
<td>Southern African Railways Association</td>
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<tr>
<td>SOEs</td>
<td>State Owned Enterprises</td>
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<td>THIA MOZAMBIQUE</td>
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<td>TRZ</td>
<td>Tanzania Railways Limited</td>
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<tr>
<td>VALE</td>
<td>Is a Name of Company</td>
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<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WBG</td>
<td>World Bank Group</td>
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Africa Map of Concessions

Source: World Bank Group-Railway Concessions in SSA
1 Introduction

The World Bank Railway Concessions Toolkit, defines a concession as: a form of public-private partnership under which the operation of railway activities on a network is entrusted to a concessionaire, while the ownership of the railway infrastructure is directly or indirectly retained by the State, the conceding authority.

In line with the above definition, this assignment shall analyse the development, form, and performance of concessions in SSA, and their impact on the performance of the railway transport sector in general.

However, it must be noted that early ‘privatization’ suggestions in the early-to-mid 1980’s were not warmly received by some governments in Africa especially those who were pursuing socialism ideologies. In addition to this, the argument against privatization was also anchored on historical and global trends.

2 Overview of Global Trends

The global trends post World War II in the 1950’s and 1960’s, saw governments establishing Public Enterprises (PE), State Owned Enterprises (SOEs) or parastatals within the public sector, so as to direct and control the economies. It was the belief of most governments that public enterprises/parastatals were the corner stones of most economies, hence the need to take control of these strategic sectors to ensure delivery of essential services. During the same period as countries were gaining their independence there was a belief that the private sectors in the new independent countries were not capable of taking up large scale investments to grow the economies, and the public enterprises were considered as able to play this role. In some of these societies, Public Enterprises were seen as the possible vehicle for interventions in the promotion and development of indigenization and strengthening domestic trade. The railway sector was one of the strategic sectors established then as one of the SOEs. The railways were then the transport mode of choice for exports of agriculture products and minerals to overseas markets. The railway was the cheapest mode of transport for passengers’ national and regional movement of citizens of these countries.

3 The Reforms

However, private sector participation in strategic sectors like the rail was met with a lot of resistance in many countries in SSA. The prevailing political considerations saw most public enterprises receiving government subsidies. In the 1980’s the demand of government support grew in other sectors like health and education that impacted directly on the citizens and the governments had to redirect its subsidies from non-critical sectors like rail as they did not require then significant investment in terms of infrastructure and equipment. The withdrawal of subsidies saw the downfall of many public enterprises such as the rail sector. By the time the government withdrew the subsidies the railways were already loss making entities and the infrastructures were requiring high level maintenance, while equipment needed servicing and replacement. The socialist approach most SSA
governments adopted was failing as resources were dwindling as they were facing threats of new entrance in the world market from the East.

The continued failing of the rail sector saw the SSA governments adopting the recommendations from African Development Bank (AFDB), and World Bank (WB) for considering private sector participation in the rail sector. From the economic point of view, the International Monetary Fund (IMF) in 1980s recommended Structural Adjustment Programmes (SAPs) that were adopted and subsequently applied in most developing countries throughout the 1980s and 1990s. The SAPs advocated for privatisation of the ailing public enterprises. The rationale was that the private sector would bring in investment, efficiency, management expertise and reduce the fiscal burden on the part of governments. The rail sector was one of the targeted public enterprises to go through the reforms as stated in the SAPs.

Privatisation refers to the shift in the provision of goods and services from public to private sector, or the total transfer of public assets into private hands. Privatisation can take various forms;

- Transfer of public assets to private ownership through the sale or lease,
- Contracting out of public assets to private operators,
- Deregulation of entry into activities previously reserved for public monopolies.

There are quite a number of models that can be used to transfer goods and services from public to private sector. These are open track access (separation), commercialization, concession and privatization models.

While privatization involves the divestiture of public assets, there are other forms of restructuring that involve non divestiture options such as commercialization, corporatization, contracting out management and service contracts, leases, concessions and public –private partnerships (PPPs).

Commercialization on the other hand, entails for example, the exposition of public enterprises to market forces and getting them to apply normal commercial criteria, to their operations. Corporatization involves turning the public enterprise into an independent, joint stock company, sometimes with or without minority ownership of the private sector. African states have on the whole been slow and reluctant to privatize. In fact, most privatization in Sub – Saharan Africa have been at the behest of the International Financial Institutions’ (IFIs) dictates as demonstrated by the fact that 70% of all Structural Adjustment Programmes (SAPs) during the 1980s contained a privatization component.

Commitment to privatization on the continent was found to be neither widespread nor strong and led one observer to conclude that such exercises were merely carried out to meet IFI conditionality (Nellis, 2003). In this context the tendency of most African countries is to seek to resolve problems of SOEs through means other than ownership change.

Further to this, some countries in the world which have implemented the privatization reforms, have done this under various names such as ‘prioritization’ in Austria, ‘industrial transition’ in Bolivia, ‘destatization’ in Brazil, ‘popular capitalization’ in Chile, ‘economic democratization’ in Costa Rica,
‘disincorporation’ in Mexico, ‘restructuring’ in Tunisia, ‘disinvestment’ in Pakistan, ‘people-ization’ in Sri Lanka and ‘denationalization’ in the United Kingdom. This testifies to the need for governments to try and take the sting out of the exercise through rebranding.

3.1 Concession

There are many ways of bringing the private sector into the transport market: outsourcing, management contracts, leases, franchises, concessions, divestitures by license or sale, and private supply and operation. Concessions, which include leasing, franchising and BOT arrangements, involve a more limited set of instruments. Where these operate, governments retain the ultimate ownership of assets and/or the right to supply, and transfer at least some part of the commercial risk of providing and/or operating the assets to a private concessionaire.

According to Kerk, (1998) concession broadly refers to any arrangement in which a firm obtains from the government the right to provide a particular service under conditions of significant market power. Rail concessions are effective ways to increase private sector participation. Concessions are contracts between a government as owner and private parties to provide some agreed rail related services. The contracts can be for infrastructure, operations, or both. Concessions normally last longer and require a more significant investment from the private sector (World Bank, 2006).

3.1.1 Overview of Railway Concession

In the World Bank report of 2006 concessions in SSA involved a contract for vertically integrated train services where the state maintained ownership of the land under the railway, while transferring most other infrastructure and rolling stock assets and the right to operate rail services to a private company during the contract period. Concessions are usually longer-term arrangements that can take advantage of private sector investment and commercial management practices. Railway concessioning can encompass the whole enterprise or specific enterprise components such as freight operations, commuter services, or long-distance passenger services. Concessioning has also been implemented in Europe, Latin America, and in many other parts of the world, with generally positive results.

Concession contracts that include rail infrastructure are typically 25 to 40 years to allow the concessioning operator to invest in long-term assets to improve its performance. A concession contract can include government investment in assets, such as infrastructure or passenger rolling stock. Infrastructure concessions are exclusive, the concession operator has the exclusive right to invest, maintain, and operate the infrastructure. Sometimes concessions can also allow operating exclusivity, or they can require the concession operator to provide access to other train operators providing specific transport services of which this has never been considered for example, in Southern Africa.

Typically, in concession arrangements, state-owners are financially responsible for workforce redundancies, existing environmental conditions, and often include service contracts with the concession operator for loss-making services such as passenger services. It has been noted that with most concession agreements challenges are encountered on termination of the concession where terminal valuations are to be calculated. The valuation of terminal costs or benefits accruing to the
private investor are calculated at the end of the concession. If assets simply revert back to state/government as the owner at the end of the concession, operators are likely to disinvest during the final years of the contract, effectively using up (sweating the assets) their earlier investments. This leaves the state/government with railway assets that are no better than when they were transferred to the operator at the beginning of the concession, or worse, assets that have deteriorated even further. In some cases, you have a Government Railway Inspector whose mandate is to monitor the condition of track and investment level. However, governments have been found to be weak from an enforcement perspective. Another option is that government agrees to pay the operator for the asset value that remains at the end of the concession requiring that a method to value the assets must be agreed upon in advance. Often, concession contracts have a renewable period to try to avoid this end-of-contract dilemma. In such contracts, a 30-year concession may be renewed for an additional period after year 20 (Kerk, 1998).

Governments have normally entered into negotiations with potential concessionaires with a railway infrastructure and equipment that is in a rundown state. In such circumstances concessions were unable to mobilize sufficient private financing for the rehabilitation. The governments in such a situation opted for on-lent loans from International Financial Institutions through the concessions for the rehabilitation. Under these arrangements, the most common practice was that the first five years of funding was for infrastructure rehabilitation, in the hope that the investment will lead to higher traffic levels that in turn, generate additional revenues that concessionaires would use to repay the on-lent loan. Governments have usually agreed to purchase at the end of their concessions the non-amortized portion of any infrastructure investment that concessionaires would have financed. Some governments have been able to obtain partial risk guarantees from IFIs to ensure payments to concessionaires.

According to Lowe (2014), concessionaires have not been keen to run passenger services that are unprofitable. There have been delays and disputes on payment of compensation by governments to concessionaires if they run the passenger services. Problems have also arisen over the level of concession fees, the duration of the concession, and arrangements for redundant staff. Financial projections produced during the concession bidding process often overstated revenues and understated costs, and as a result some concessionaires found themselves in a liquidity trap. In some cases, the latter required a complete restructuring of the concessions. In reviewing these experiences, the conclusion of the World Bank is that despite these difficulties, the results to date are encouraging.

3.1.2 Railway Concessions in Sub-Saharan Africa

Until the 1980s, (World Bank, 2006) almost all railway companies were publicly owned corporations, with varying degrees of financial and management sovereignty. In some cases, attempts were made to commercialize the railways while retaining public ownership, but this was unsuccessful. As a result, concessions were introduced in many countries in the 1990s. Under the most common forms of concessions the state/government remained the owner of all or some of the existing assets, mostly the infrastructure and transferred the assets like the rolling stock and the responsibility to operate and maintain the railway to a concessionaire.
In thirty (30) SSA countries, railways were publicly owned and since 1992, sixteen (16) were concessioned. **Annexure 1**, gives a summary of the concessions in SSA where 4 have been terminated, 8 were renegotiated and are operational, and of the 4 operational concessions, 1 is a Build-Operate and Transfer (BOT). A further four private initiatives, have begun the privatization/concession process in SADC, and these are: the Moatize (Mozambique)-Nyaka (Malawi) 136km Vale, private line link to the Nacala CDN line, Moatize (Mozambique)-Macuse (Mozambique) 537km Thia Mozambique, private new railway line and port, Chongoene (Mozambique)-Baragem (Mozambique) 200km STT, private line and port link to the Lompopo corridor (Mozambique-Zimbabwe), and the Chigola (Zambia)-Jimbe (Angola border) 604km public/private line link to the Lobito corridor. While the Vale line is under construction, the other three are at pre-feasibility and feasibility stages.

According to the Pozzo di Borgo (2010), the creation and operation of these concessions have experienced some challenges. In many cases, attracting more than a few bidders has been difficult, and in several cases, bidders’ financial resources have been insufficient to finance the major investments required. In a number of cases, the State has had to guarantee these private investments or to fund them.

According to the World Bank (2009): most countries in Central, East, and West Africa embarked on concessioning because of pressure from multilateral and bilateral organizations as a condition of obtaining loans for asset rehabilitation. The current status of railway services in countries like South Africa, Namibia, Botswana, and Swaziland, in Southern Africa do not require any reforms except Angola, DRC, Tanzania, Zambia and Zimbabwe. Railways that have not been concessioned remain subject to significant political and governmental influence. Although most railways ostensibly have financial and managerial autonomy, legal and regulatory frameworks often allow the state to intervene at both the institutional and jurisdictional levels, doing much to discourage managers’ initiatives and effectiveness.

### 3.1.3 Successes of Railway Concessions in SSA

SITARAIL and CAMRAIL have both been a success story of concessions in SSA, mainly because of a well-funded concessionaire and corporate governance. CAMRAIL is a good example of rail/road collaboration in providing door-to-door service, with its Rail to Ngaoundere’ border, (Doula-Ngaoundere’ Corridor) then transshipment onto road trucks for onwards delivery to neighboring Chad and Central Africa Republic.

In Zimbabwe, Beitbridge Bulawayo Railway (BBR) a Build Operate and Transfer (BOT) concession is considered by the concessionaire to be successful since its establishment in 1999, although it has been difficult to evaluate it because of the secrecy surrounding the concession agreement. The concession was signed “in Camera” between the Government of Zimbabwe and New Limpopo Bridge Projects Limited Investment (NLPI). BBR being a private company, its annual reports are not open for inspection by any other party. Hence, its success or failure is hard to determine. Suffice it to say that, the concessionaire’s word has been taken as “the truth”, since 1999. This demonstrates the weakness of government in terms of supervision. Ironically, the same concessionaire’s agreement was cancelled in Zambia (Phipps, 2009). The fundamental issue that must come out is that the
concessionaire constructed a new rail link (173km) and took over about 150km from government in return for 15% shareholding. Nobody is certain as to whether or not government gets a share of the dividends there of.

According to (Phipps, 2009) the Zambia concession of Zambia Railways Limited (ZRL) to the Railway Systems of Zambia (RSZ) was successful initially, in as far as controlling the deterioration of Zambia Railways infrastructure and allied equipment. Government was freed from spending on the railway investment capital. Long haul freight service significantly improved. However, the concession has been a failure in regards to several of the fundamental goals of the concession as it related to the critical inter-mine short haul movements supporting the copper industry. The concessionaire, RSZ ignored and abandoned some of the agreed operational activities, especially inter-mine transportation of copper and sugar, to smelting plants and sugar processing plants respectively, which saw the business volumes falling as shown in graph 1 below that showed that the concession worsened railway performance in terms of traffic volumes moved.

Graph 1. Business volumes moved by rail before and after concession in Zambia

The above graph shows that when the concessionaire took over from Zambia Railways Limited in 2003 the traffic levels were at 1,495,000 (one million four hundred and ninety-five thousand tonnes). The volumes declined to 862,957 (eight hundred and sixty-two thousand nine hundred and fifty-seven) in 2007 and the trend has continued to deteriorate until the concession was terminated in 2012. The structure of the concession split the high margin long haul portion from the low margin inter-mine movements. This was due to differences in management philosophies of a state owned entity to a private entity-to the public operator short hauls supported an essential economic industry, while to the
concessionaire, short movements were considered uneconomic in terms of tariffs and revenues. This impacted on the volumes transported by the concession.

Further, during the concession there were a lot of speed restrictions along the mainline because the RSZ reneged on one of its concession obligation of maintaining the permanent way. This increased the transit time, resulting in the railways then becoming unfavourable mode of transport mostly from the mining sector that had shipping line schedules to meet. The company was also charging the highest cents/km compared to other regional railways on the same corridor.

3.1.4 Challenges of concessions

In discussing the challenges of concessions, consideration must be given to the fact that rail concessions in SSA have evolved for almost 25 years since their establishment. Therefore, a lot of lessons have been learned, which will enable some recommendations to be made, with regards to effective models consideration.

Following the concession of some 14 railways in Sub Saharan Africa, a number of challenges emerged, the root causes of which are mainly two issues: Governance and Infrastructure; leading to declining performance in certain areas, declining state of infrastructure, massive retrenchments, reduced business cooperation amongst railways in many areas, reduced frequencies of passenger services and in some cases increased tariffs.

Although the state subsidies to railways had been eliminated thereby bringing about fiscal relief to the states concerned, the reduced capacity of such railways, experienced what was termed as traditional (rail friendly) rail traffic, moving to road with the concomitant result of immense damage to road pavements, which in turn are repaired by the national purse. In some cases, some rail concessions were privately and secretly negotiated and awarded without International Competitive Bidding (IBD) e.g. the Beitbridge Bulawayo Railway Concession (BBR), where little is known of the terms of the concession as it was negotiated in camera with the Government of Zimbabwe (GOZ). Current studies on the challenges and reasons for failure of most concessions to achieve expectations reveal the following:

i. Governance as a concession challenge

According to Kerf, (1998) the interface between the governments and the private sector is key to the success of any concession model adopted. The governments need to perform numerous tasks when planning, designing, implementing and regulating concessions, and any inefficiencies can result in the government making substantial cost even to the consumers who are the citizens. Governments should try to implement laid down principles to improve the way they manage concessions. Adoption of these principles could reduce total termination of concessions to renegotiation. Total cancellation of concessions in Zambia, Tanzania and Mozambique was very costly to the governments and could have been avoided. Governments need also to engage expertise in the area of implementing concessions. Table 2 below summaries some of the government responsibilities for concessions (Kerf, 1998).
Framework

- Adopting legal provisions to enable the granting of concessions.
- Establishing or identifying regulatory authorities.
- Managing government support to infrastructure projects.
- Managing public relations and information.

Project identification and analysis

- Identifying projects amenable to concessions (including in-house and unsolicited proposals).
- Prioritizing projects amenable to concessions.
- Hiring advisers.
- Performing a preliminary review of the costs and benefits of the project (without duplicating the analysis to be performed by the private sector), especially in cases where the government will be assuming part of the market risk.
- Reviewing legal and regulatory issues.
- Determining preliminary selection criteria.
- Granting permission for the project to go ahead (for example, for the opening of the bidding process).
- Setting a timetable for the project.

Enabling and supporting measures for specific projects

- Granting permits and other necessary authorizations (such as environmental permits, rights of way).
- Determining the form of government support for the project

Design of the concession arrangements

- Choosing legal instruments.
- Allocating responsibilities.
- Choosing and designing pricing rules and performance targets.
- Determining bonuses and penalties.
- Determining duration and termination.
- Designing adaptation mechanisms to new and unforeseen circumstances.
- Choosing and designing a dispute settlement mechanism.

Concession award

- Choosing the method of award.
- Making of decisions regarding prequalified and short listing.
- Determining bidding rules and procedures.
- Proceeding with bidding.
- Negotiating

Exercise of regulatory function

- Implementing regulatory rules.
- Supervising and monitoring.
- Enforcing rules (for example, imposing penalties).

Table 2. A Sample of Government Responsibilities for Concession
Source: Klein, So, and Shin (1996), and World Bank Staff

Although governments in SSA have embraced privatization or liberalization of their economies, using whatever funding model is made available, they are not sure of the best fit; for example, in SADC, the BBR (Zimbabwe) private model, as compared to the CCFB (Mozambique) public/private model. The private model (BBR) in Zimbabwe is where the investor wholly owns the infrastructure and is the operator compared to Private Public Partnership (PPP) of CCFB in Mozambique where the infrastructure belonged to Government and the investor operated on the network, which they were supposed to rehabilitate and/or upgrade within a certain agreed time frame. At the same time, the challenge to governments, is how best to proceed with acceptable (public or private) reforms and investment in State Owned Enterprises (SOE), especially in the rail transport sector. There is fear of losing ownership, power and control over strategic sectors and essential services such as rail transport, energy generation etc., even though they require heavy subsidies from the public purse, as compared to the needs of the market economy through privatization, which could bring more revenue to the state, to provide for economic development and wealth creation for both the state and its citizenry. These fears by governments in SSA, are real, and have emanated from or resulted in:

- The absence of enabling legislation and regulations in several concessions obligations. In most cases, the contract language did not anticipate every circumstance and eventuality that might
arise. Clear definition of investment maintenance and force ‘majeure’ are but some of the few areas of dispute. While, the expectations for providing passenger services is unclear, as to which part is responsible for what, especially with regards to fare subsidies.

- Failure to enact enabling legislation and to establish a Railway Regulator prior to concession. This was found to be the case in Zimbabwe, Zambia, Mozambique and Malawi. Although the Railway Safety Regulator (RSR) should be established by an Act of Parliament, in the same manner as the Judicial Institution, it has to work and act independently, so as to be an impartial abettor between the parties, in case of disagreements. This is because, without acting independently, its authority will be compromised, so will be railway safety.

- Failure to have a clear understanding of the roles and responsibilities of the concessionaire and government as they relate to infrastructure rehabilitation and investment. This was found to be the case in Zambia, Mozambique and Malawi. This is because member states or their governments do not have the negotiating expertise during the negotiation stage of the agreement. Governments tent to accept whatever is recommended by IFIs who support the process.

- In some cases, the concession model used seems to be a “one size fits all” template. For example, in SADC, - Mozambique, Zambia, Tanzania etc., which stipulates similar conditions: entry fee, fixed fee (annually), variable fee expressed as a percentage of revenue, lease payment for use of asserts, labour reform, without consideration to the peculiarity of each country and REC. Again, this is because of the fact that governments’ negotiating capacity is weak, resulting in them accepting the IFIs recommendations on the model suggested– a repetition of a similar model, generally in every concession.

- To consider the one concession model as what happened in SADC (Zambia-RSZ and Mozambique-CCFB), which stipulates similar conditions: entry fee, fixed fee (annually), variable fee expressed as a percentage of revenue, lease payment for use of asserts, labour reform, without considering peculiarities of each country is not advisable.

- Failure by parties to establish clear Public Service Obligations (PSO)**

- Failure to have a sound business plan that would support capital investment, so as to maintain the railways in an operational condition e.g. Malawi.

- Failure to set deadlines and timelines and sequencing of concession processes from time of announcement of intent to finalization of the concession. This was found to be true in Zambia, Mozambique and Tanzania. The lengthy process (period of uncertainty) had adverse impact on employee morale, asset deterioration and loss of business to road

- Splitting concessions into units, one of which was attractive and one which was not, leading to concessionaires focusing only on attractive sections, and having in fact abandoned the unattractive yet necessary business-branch lines to the mines. This was true in Zambia.

- Granting a privately negotiated concession that contained clearly anti – competitive clauses which severely impacted on other railways within the SADC regions’ network thereby creating a private monopoly – BBR concession in Zimbabwe.
• There is no oversight on monitoring and accounting for concession’s performance, resulting in the concessionaire neglecting some of their obligations, by concentrating only on the bottom line.

• In most concessions, there are no equitable labour reforms to ensure social mitigation for retrenched employees, for example in Zambia and Tanzania. However, Mozambique is an exception to this challenge, so are both CamRial and SITARAIL in West Africa, where retrenched employees’ welfare was well catered for.

** PSO= It is government’s role to provide transport beneficial to the community, and where the provision of transport service, such as passenger trains, is given to a private operator, at less than a fair economic rate, the government has a contractual obligation to compensate the private operator for the loss of revenue from that service.

** ii. Infrastructure and Finance as concession challenge**

It is observed that most concessions underestimated the challenges from infrastructure and rolling stock needs of the railway systems they targeted. On the other hand, they overestimated the business available in the market, especially freight; as a result, there is undercapitalization of the concessions, which would not enable them to operate according to expectations. More so, concessions are not part of the whole railways system of the country. Their performance is therefore impacted by or impact on the other parts of the system, which they do not control- as is the case of BBR in Zimbabwe, where the infrastructure on the longer section of the route, is under the responsibility of the National Railways Zimbabwe (NRZ), which does not have the means to maintain it, resulting in speed restrictions or cautions being imposed on most sections of the line. On the other hand, when the concessionaire’s trains are derailed or involved in accidents, the responsibility to repair the line lies with NRZ, and because of lack of funding and equipment, it takes time to clear the line and make it operational again. Again, it has been observed that lack of financial resources to either rehabilitate or maintain the infrastructure, has been one of the major reasons for the cancellations or renegotiation or takeover of some concessions; for example, RSZ-Zambia, where the concessionaire after a couple of years, realized that they had underestimated the level of investment for infrastructure/equipment maintenance, thus neglected that obligation. While CCFB- Mozambique was required as per the agreement, to rehabilitate the SENA line (Beira -TETE) within a certain period of time, but could not meet that requirement, instead they asked to be given a six months’ extension, which they were granted, and still failed to complete the work within the extended time. As a result of the underestimation of the level of investments required, these two concessions were terminated by the governments concerned. This was a failure on the part of the concessionaires.

It must be noted that, in most cases the concessionaires deliberately ignore some of their obligations because of lack of capacity on the government to monitor the terms of the agreement, until it is too late, when they are forced to terminate the concession.

3.1.5 Lessons Learned

Pozzo di Borgo (2005), on the effectiveness of concessions in SADC, highlighted some operational performance measures and monitoring as lessons learned. Top of the list is the need for concessions’
performance measures and monitoring mechanisms to ensure adherence to the terms and conditions (T&Cs) of the agreement, and the resultant areas of disagreement between the parties. The following are points to ponder, which can be gleaned from the WB report-RSZ (Zambia), and should be good points of reference for other concessions in SSA:

- Lack of agreed monitoring schedule framework or procedures between the parties.
- The concessionaire not adhering to concession agreements regarding to timetable for effective rehabilitation of the main railway track. Although this is in the agreement, the government has no expertise to monitor and impose maintenance and rehabilitation investments, resulting in the worsening of the infrastructure of the railways concerned.
- Limited investment in rolling stock maintenance leading to obsolete wagons and passenger coaches;
- The market share of the concessionaire to international rail freight traffic is uncertain due to the lack of agreement between the concessionaire and other rail operators, like in the case that was between TAZARA and RSZ;
- The concession fees paid by the concessionaire, was not paid in time as agreed;
- Passenger services on the main line not adhered to regularly as agreed, like in the case of RSZ in Zambia between Kitwe and Livingstone;
- Lack of infrastructure maintenance leading to freight and passenger trains moving at very low speed, leading to long wagon turnaround times for goods and services, e.g., Zambia between Kitwe and Livingstone; and Zimbabwe between Saw Mills and Victoria falls; it is the responsibility of the concessionaire. Although government has the power to ensure that the terms of the agreement with regards to infrastructure maintenance/rehabilitation, they do not have the expertise to detect and enforce this requirement in time. The main problem is that the concessionaire in most cases negotiate with governments not railway experts. On the other hand railway expertise resides in the railways themselves not governments.
- Lack of capacity at the time of negotiations, on the part of the host country to (leading to the subsequent outcome agreement) closely scrutinize the clauses especially regarding how such clauses would impact on the country’s economy and the investor's economic interest. Zambia and Zimbabwe are typical examples; but also deliberate failure on the concessionaire side for not evaluating properly the costs it will have to support- thus taking advantage of the weaknesses of the host government.
- It appears, there was too much leeway in favour of the investor in coming up with the concession agreement as is the case in Zambia, Zimbabwe, Mozambique and Tanzania. This is a lesson that needs to be considered in all future concession negotiations.
4 Conclusion and Recommendations

4.1 Conclusion

The rail concessions’ operational and financial success or failure, is a subject for debate by all stakeholders. The SSA governments argue that most of the concessions fail, due to the model recommended by the IFIs and cooperating partners like the WB that are not suitable for Africa, while on the other hand the cooperating partners argue that the performance of concessions have been successful. What needs to be done, is to put in place mechanisms to monitor and evaluate the performance of the existing concessions, to determine properly their success or failure, without which, IFIs’ word will always be taken is truth. The main challenge for railways is infrastructure, unless the adopted model directly addresses this issue, it is very unlikely to achieve positive results.

4.2 Recommendations

Based on the evaluation and analysis of various experiences of rail concessions in SSA so far, the following crucial vision and mission critical issues need to be addressed:

- To avoid termination of concessions the SSA governments should stand firm on their responsibilities and be transparent. Concessions have worked in some parts of Africa, SitaRail and CamRail—both privately operated and managed by the Bolloré Group, a French company—are examples of successful concessions, so is RVR in East Africa. These concessions have worked successfully because the concessionaire operates and manages the railways independently and without little (if any) interference from the government. Most importantly, is the fact that these concessionaires are able to provide and inject funding to maintain rail infrastructure and rolling stock, thereby keeping the railways up to effective and sustainable operational standard, and therefore competitive. These are critical success factors for concessions.

- The concession model needs to be revisited, with a view to making it sensitive and take cognisance of the peculiarities of the different country and REC situations; and the RECs should play an advisory role to member states; Just because the operations of the concessions in a corridor, impact on the overall performance of the railways, as well as trade facilitation in the region, the RECs should—through their regional transport and trade facilitation protocols—encourage member states to take cognisance of their own situations, and how these are dependent upon that of the regional and connecting states.

- Comprehensive prior feasibility studies to be conducted, and for the institutional structure selected to adhere to a rigorous and strict arrangement, as stipulated (which is lacking in most concessions);

- The proposed concessioning project to have firm political support, with clearly defined roles and responsibilities of the parties, as well as their relationship with the public rail operator (this is missing in most concessions);

- It is necessary, in fact, it is imperative to have an independent rail regulator with authority to licensing, steering, monitoring and policing the concessions and other rail operators, in place before the taking on of a concessionaire. (which is non-existent in most SSA countries). A
good example is South Africa, where the presence of an independent Rail Safety Regulator, helps in monitoring of safety operations and management, as well as ensuring that rail guidelines are observed by the operator. This has proved valuable in terms of the performance of the railways. This should be emulated by other countries in SSA.

- Elaborate and equitable labour reforms need to be well thought out, in order to allay both government and affected staff fears. A good example of where this was done satisfactorily, is in Mozambique, Zambia and Cameroun, where the welfare of employees was well considered and taken care of, as observed by the World Bank Labour Toolkit, thus: The lesson from past experiences is that labour-shedding operations may prove more successful than might have been feared so long as:
  - Trade unions are properly involved;
  - A sufficiently generous redeployment program is provided; and
  - Companion measures or retraining efforts are introduced. In this regard, the labour redundancy toolkit, also prepared by the Bank, has reference;

- Once the concession agreement has been signed, governments should avoid interference in their operations, this should be left to the rail safety regulator, which institution should monitor and enforce the partnership agreement, including the operation of market forces to allow for rail/road collaboration and competition, as well as to discourage monopolistic and discriminatory practices. In the absence of a rail safety regulator, it would be advisable that an independent expert be appointed to oversee the process.

- Considering concessions as a device that can be used to create competition for a market, when competition in the market is not operating, in which case concessions can be thought of as legal arrangements suitable for creating competition for the market. Concessions are typically given to privately owned companies.

- Concessions contracts to include passenger service as corporate social responsibility, with government making good subsidies, for any differences in in passenger fares, because the private service provider would not want to provide that service at an uneconomic fare.

- There is need to develop further some instruments already designed before monitoring and evaluating concession projects, without inventing the wheel by making use of table 1

- There is also need to re-examine, review and recommend mechanisms that can be applied across RECs, to monitor and evaluate different concessions taking cognizance of different characteristics of each type of concession. Consideration should be given to the following options:
  - Infrastructure separation- where government is responsible for rail permanent way, just as it does with national road networks, and let out operations to private rail operators, more than one for both freight and passengers, so as to allow and encourage competition
  - Put public railways operations under private management, to bring efficiency and to grow the market- free from government financing and other bureaucratic constraints
MODULE 14 RAILWAYS

- Government and interested private investors to negotiate and agree on a suitable model of private sector participation, which is respected by both parties. Choice of model should depend on government’s objectives, which must be certain and clear for a sustainable solution to be reached, and in so doing governments must recognise the balance between public interest and commercial interest, for the model to be fair and sustainable.

- There is need to identify other privatization models that can be applicable to different RECs and recommend the best, based on the lessons learned from the concession models that have been adopted and are still being implemented successfully operating in SSA. It should be noted that at times it is not the model that does not work, but the contents of the individual agreements and the implementation of the agreed terms and conditions that lead to termination of the concessions. It should also be noted that privatization is not always the only solution. Countries need to consider other business solutions in improving the service delivery in the railways. Even public operators could successfully play this critical role; provided public railways managers are empowered, institutionally and financially, and not interfered with or controlled like government departments- performance or results oriented and time based contracts are advisable. After all, railway expertise resides in the railways themselves and not outside at government level.

- It is generally believed in COMESA, SADC and EAC that governments do not have negotiating capacity, they should therefore enlist public railway managers or seek outside expertise, to negotiate with investors who approach them directly or they should look for interested private parties, to participate in the operations of their railways; based on the governments’ intended objectives and the investor’s commercial needs. And, with regards to existing concessions, governments should engage experts to help them interpret and ensure the agreements are observed and adhered to by both parties, before it is too late- until the end of the concession.

- Establish an independent RSR (Rail Safety Regulator) in each REC:
  - To oversee safety in the railway transport system
  - Issue operating permits to both public and private operators
  - Conduct safety management and inspections of rail infrastructure and equipment
  - Assess the overall performance of railway system and institutional capacity to ensure safety is observed at all times
  - Improve rail safety compliance and adequacy
  - Ensure agreements between parties operating on the same railway system, are observed and respected.
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## 6 Annex

### 1. Key features of SSA Rail concessions, 1993–2016

<table>
<thead>
<tr>
<th>Countries</th>
<th>Concessionaire</th>
<th>Effective date of contract</th>
<th>Length of line</th>
<th>From to: Towns</th>
<th>Commodities carried</th>
<th>Status</th>
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<tr>
<td>Côte d’Ivoire</td>
<td>Transrail</td>
<td>2003 - 2005</td>
<td>1287KM</td>
<td>Bomako- Daka</td>
<td>Timber, cement, fertilizer, minerals and other commodities</td>
<td>Operational; Private; CANAC-Getma.</td>
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<td>Mali Senegal</td>
<td></td>
<td>2005-</td>
<td></td>
<td></td>
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<td>Replaced by Savage Services USA</td>
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<td><strong>Central Africa</strong></td>
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<td>Cameroon</td>
<td>Camrail</td>
<td>1999</td>
<td>626KM</td>
<td>Douala-Ngaoundere</td>
<td>Timber, petroleum, ores. Agriculture produce and other-containerized cargo</td>
<td>Private: Consortium operational. Still operational</td>
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<td>Gabon</td>
<td>Transgabonaise Setrag</td>
<td>1999 2005</td>
<td>649KM</td>
<td>Owendo-Franceville</td>
<td>Timber, petroleum, ores. Agriculture produce and other</td>
<td>Private operational, renegotiated 2005</td>
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<tr>
<td>Kenya Uganda</td>
<td>RVRC</td>
<td>2006 - 2008 2008 - 2010</td>
<td>1660KM</td>
<td>Mombasa-Malaba-Kampala</td>
<td>Cement, ores, agriculture, timber and Other-containers</td>
<td>Private operational renegotiated twice</td>
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<td><strong>SouthernAfrica</strong></td>
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<tr>
<td>Malawi</td>
<td>CEAR CDN</td>
<td>1999³ 2005 - 2010</td>
<td>979KM</td>
<td>Mchinji-Lilongwe Nayuchi-Nacala Beira–Moatize/tete Beira-Machipanda</td>
<td>Cement, petroleum, ores, containers, other Petroleum, ores, agriculture produce, containerized cargo, Sugar, Fertilizer</td>
<td>Public/Pvt, CDN-part taken over by Vale in 2010</td>
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<td>Mozambique</td>
<td>CCFB</td>
<td>2004 - 2010</td>
<td>892KM</td>
<td></td>
<td></td>
<td>Public/Pvt CFM/Rites Terminated in 2010</td>
</tr>
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<td>Countries</td>
<td>Concessionaire</td>
<td>Effective date of contract</td>
<td>Length of line</td>
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<td>Mozambique</td>
<td>CDN</td>
<td>2005 - 2010</td>
<td>615KM</td>
<td>Nacala-Entre Lagos</td>
<td>Cement, petroleum, ores, containers, other</td>
<td>Public/Pvt, part taken by Vale in 2010</td>
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<td>Madagascar</td>
<td>Madarail</td>
<td>2003</td>
<td>875KM</td>
<td>Toamasina-Antananarivo</td>
<td>Containers and other</td>
<td>Public/Pvt. Operational</td>
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<td>Zambia</td>
<td>RSZ</td>
<td>2002 - 2012</td>
<td>1860KM</td>
<td>Livingstone-Whole of Zambia</td>
<td>Copper, cement, Fertilizer, sugar, Containers and other</td>
<td>Private, Terminated 2012</td>
</tr>
</tbody>
</table>

Source: Adapted from: Data collected from companies, di Borgo and others (2006).
MODULE 15 INLAND WATERWAYS TRANSPORT: A POTENTIAL COMPETITIVE MODE OF TRANSPORT

By Sion Haworth

Table of Contents

1 Introduction........................................................................................................................................... 4
  1.1 Purpose........................................................................................................................................ 4
  1.2 Scope........................................................................................................................................... 4
2 West Africa ........................................................................................................................................... 5
  2.1 River Niger ................................................................................................................................... 5
  2.2 Access to Mali ........................................................................................................................... 6
  2.3 Lake Volta ................................................................................................................................... 7
3 Central Africa ...................................................................................................................................... 8
  3.1 River Congo ................................................................................................................................... 8
  3.2 Other Waterways in DRC ........................................................................................................ 10
4 East and Southern Africa ................................................................................................................... 12
  4.1 Shire-Zambezi ............................................................................................................................ 12
  4.2 Lake Tanganyika ......................................................................................................................... 13
  4.3 Lake Victoria ............................................................................................................................. 15
  4.4 Lake Malawi ................................................................................................................................ 21
5 Advantages of Inland Water Transport ......................................................................................... 25
  5.1 Cost ........................................................................................................................................... 25
  5.2 Capacity ...................................................................................................................................... 25
  5.3 Fuel Consumption ..................................................................................................................... 26
  5.4 Safety ........................................................................................................................................ 26
  5.5 Environmental costs .................................................................................................................. 26
  5.6 Reliability ................................................................................................................................... 27
  5.7 Infrastructure and Maintenance costs ..................................................................................... 27
  5.8 Infrastructure Capacity ............................................................................................................. 27
  5.9 Types of Cargo ......................................................................................................................... 27
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>International Best Practices</td>
<td>27</td>
</tr>
<tr>
<td>6.1</td>
<td>Principles</td>
<td>27</td>
</tr>
<tr>
<td>6.2</td>
<td>Examples of European Best Practice</td>
<td>28</td>
</tr>
<tr>
<td>7</td>
<td>Recommendations</td>
<td>30</td>
</tr>
<tr>
<td>7.1</td>
<td>Introduction</td>
<td>30</td>
</tr>
<tr>
<td>7.2</td>
<td>Managing Climatic Hazards</td>
<td>31</td>
</tr>
<tr>
<td>7.3</td>
<td>Policy</td>
<td>32</td>
</tr>
<tr>
<td>7.4</td>
<td>Legal and Regulatory</td>
<td>32</td>
</tr>
<tr>
<td>7.5</td>
<td>Human Capacity</td>
<td>33</td>
</tr>
<tr>
<td>7.6</td>
<td>Infrastructure</td>
<td>33</td>
</tr>
<tr>
<td>7.7</td>
<td>Institutional</td>
<td>33</td>
</tr>
<tr>
<td>7.8</td>
<td>Other Pan-National Institutions</td>
<td>34</td>
</tr>
<tr>
<td>7.8.1</td>
<td>Co-ordinated Concession Management</td>
<td>34</td>
</tr>
<tr>
<td>8</td>
<td>Appendix 1: River Nile</td>
<td>36</td>
</tr>
<tr>
<td>9</td>
<td>Appendix 2: Glossary Of Terms</td>
<td>41</td>
</tr>
</tbody>
</table>
### List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>CAR</td>
<td>Central African Republic</td>
</tr>
<tr>
<td>CICOS</td>
<td>Commission Internationale du Bassin Congo-Oubangui-Sangha</td>
</tr>
<tr>
<td>COR</td>
<td>Congo-Ocean Railway (Chemin de fer Congo Ocean)</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for East and Southern African</td>
</tr>
<tr>
<td>EARHC</td>
<td>East African Railway and Harbours Company</td>
</tr>
<tr>
<td>ECCAS</td>
<td>Economic and Monetary Community of Central Africa</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>FED</td>
<td>Fonds Européen de développement (FED)</td>
</tr>
<tr>
<td>IWRM</td>
<td>integrated water resources management</td>
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<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>KPA</td>
<td>Kenya Ports Authority</td>
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<tr>
<td>LVBC</td>
<td>Lake Victoria Basin Commission</td>
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<td>LVTC</td>
<td>Lake Volta Transport Company</td>
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<tr>
<td>MSCL</td>
<td>Marine Services Company Limited</td>
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<tr>
<td>MTBS</td>
<td>Maritime &amp; Transport Business Solutions</td>
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<tr>
<td>NIWA</td>
<td>National Inland Waterways Authority</td>
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<td>NRPMC</td>
<td>National River Port Management Company</td>
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<tr>
<td>ONATRA</td>
<td>Office National des Transports (DR Congo)</td>
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<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
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<tr>
<td>PPPU</td>
<td>Public Private Partnership Unit (Kenya)</td>
</tr>
<tr>
<td>RTA</td>
<td>River Transport Authority of Egypt</td>
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<tr>
<td>RTC</td>
<td>River Transport Company (Egypt)</td>
</tr>
<tr>
<td>RVR</td>
<td>Rift Valley Railways</td>
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<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SCEVN</td>
<td>Service Commun d'Entretien des Voies Navigables</td>
</tr>
<tr>
<td>TEU</td>
<td>Twenty-foot equivalent unit</td>
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<tr>
<td>TPA</td>
<td>Tanzania Ports Authority</td>
</tr>
<tr>
<td>TRL</td>
<td>Tanzania Railways Limited</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Purpose
This report provides an input to the development of guidelines for the implementation of transport sector policy. The Guidelines will provide a set of instructions with the required information and tools necessary to assess the conditions implement the recommendations of the Transport Policy White Paper prepared by the African Union.

This report:

1) Summarises the potential of the rivers/lakes as a transport mode by sub regions (West, Central, East and Southern Africa)
2) Identifies the main challenges and bottlenecks to make these rivers and lakes navigable;
3) Outlines the main advantages of transport by inland water.

1.2 Scope
The main African inland waterways comprise four rivers (Nile, Congo, Niger, and Zambezi Rivers) and three lakes (Victoria, Tanganyika, and Malawi), as shown in Figure 1.1.

Figure 1.1. Major Rivers and Lakes in Africa
2 WEST AFRICA

2.1 River Niger

Nigeria

Nigeria has 8,600 km of inland waterways. The longest are the Niger River and its tributary, the Benue River and the most used for commercial transport and commerce, are in the Niger Delta and all along the coast from Lagos Lagoon to Cross River.

The National Inland Waterways Authority (NIWA), previously the Inland Waterways Department of the Federal Ministry of Transport, was established in 2004 with the primary responsibility to improve and develop Nigeria’s inland waterways for navigation.

NIWA issue licenses for inland navigation, piers, jetties and dockyards; examine and survey inland watercraft and shipyard operators, grant permit and licenses for sand dredging, pipeline construction, dredging of slot and approve designs and construction of inland river crafts.

NIWA is equipped with a number of vessels enabling us to operate ferry services (for economic goods and passengers) and run cruise boats (for tourism and leisure). NIWA also constructs inland riverports and jetties, along with capital and maintenance dredging.

It carries out hydrological and hydrographic surveys, river chart production, cartography, river mapping and aerial survey. NIWA also removes and receives derelicts wrecks and other obstructions from inland waterways; clears water hyacinth and other harmful weeds, and engages in boat construction/repair and other dockyard services.

The dredging of lower River Niger with the main objective of achieving an all year round navigation of the dredged channels from Warri in Delta State to Baro in Niger State, is part of the Federal Government’s commitment in improving inland water transportation in Nigeria. Historically, the idea of dredging the lower River Niger was mooted in the late 1950’s but little was effected at that time. Hitherto, the waterways that are currently dredged had served as strong and viable route of water transportation in the country. During the colonial times, mails were sent to Onitsha from Lokoja through River Niger waterways by the colonial authorities; the Royal Niger Company and its French counterparts used the Rivers Niger and Benue as routes to move raw materials from the hinterland and exports from Northern Cameroun for industries in Europe and Northern America.

The first contract for the dredging of lower River Niger was let in 2008 and this was later reviewed upwards to deal with additional siltation of the River channels thereby putting the entire project cost at N43.3billion.

The dredging of lower River Niger contract from Warri in Delta State to Baro in Niger State, which covers an estimated 572km in eight states namely; Kogi, Niger, Edo, Delta, Anambra, Imo, Rivers and Bayelsa is divided into five lots with several bifurcations -capital dredging works, maintenance dredging works, river training works (installation of navigational aids) and community development works.
The capital dredging project was successfully completed in June 2011 and maintenance dredging started immediately and a reasonable portion of the maintenance dredging has being completed. In addition, navigational aids have been installed in the dredged channels while buoys to signify safety and sensitive zones and to mark the dredged channels have been installed and laid.

The result of this is that all the routes from Baro in Niger State to Warri in Delta State are now open and accessible for vessels to move products and goods through these dredged channels to different parts of the country. The first commercial operation in August 2011 saw NINON, a Marine Transport Company move 300 tonnes of tiles equivalent to 15-20 truckloads of tiles from Lokoja through the dredged lower River Niger channels to Onitsha. Now much larger vessels are able to ply from Port Harcourt to Baro, which were unable to do prior to the dredging.

The completed the dredging of 572 kilometers’ distance of the waterways to facilitate all-year navigation activities and the maintenance dredging, has led to the proposal for a joint venture arrangement to establish a channel management company that will take over the maintenance dredging.

Goods are now being transported over long distances at relatively low rates. 1.6 million tonnes of cargo moved in the first three quarters of 2014. Passenger traffic in the same period was 6,685,000. River ports at Baro, Oguta and Lokoja have been completed.

The main potential for multimodal transport using the River Niger will centre on the port of Warri. In 2016, the Federal Government signed a Memorandum of Understanding, MoU, with China Railway Construction Corporation, (CRCC), for the construction of Warri-Ajaokuta-Itakpe-Abuja rail line. The rail line will extend to northwards from Eganyi-Jakura-Baro to Abuja, and the MoU provides for the construction and expansion of Warri port, deep sea port and industrial park at Bonny Island. It is designed to part of the economic growth corridor in Nigeria intended reduce imports and focus on industrialization, leading to economy and social development.

2.2 Access to Mali

The Niger River in Mali is 1,782 km (1,107 mi) long, is navigable except for a 59-km stretch between Bamako and Koulikoro (the main river port), where it is cut by rapids. Regular service on the Niger is generally maintained from July through January.

Parts of the Senegal River also are navigable, providing year-round access to the Atlantic from Kayes to St. Louis in Senegal. In 1972 Mali, Mauritania and Senegal founded the Organisation pour la mise en valeur du fleuve Sénégal (OMVS) to manage the river basin. Guinea joined in 2005.

At the present time, only very limited use is made of the river for the transport of goods and passengers. The OMVS have looked at the feasibility of creating a navigable channel 55m in width between the small town of Ambidédi in Mali and Saint-Louis, a distance of 905km. It would give Mali a direct route to the Atlantic Ocean.[2]
Mali has one railway, including 729 kilometers in Mali, which runs from the port of Koulikoro via Bamako to the border with Senegal and continues on to Dakar. The Bamako-Dakar line, which has been described as dilapidated, was owned by a joint company established by Mali and Senegal in 1995, with the eventual goal of privatization. In 2003 the two countries sold a 25-year concession to run the rail line to a Canadian company, which has pledged to upgrade equipment and infrastructure.

The Malian portion of the railway carried an estimated 536,000 tons of freight and 778,000 passengers in 1999. The track is in poor condition, and the line is closed frequently during the rainy season. The line is potentially significant because it links landlocked Mali to the port of Dakar, increasingly of interest for Malian exports in the face of the disruption of access to Abidjan.

Kayes, on the Senegal River, is linked to Bamako by rail.

There are two options for multimodal transport corridors to Mali:

- Using the River Niger with a transhipment facility at Koulikoro, allowing onward transport to Bamako. This would provide Mali with an strategic alternative seaport.

- Linking Bamako via Kayes by rail then transhipment on the Senegal River to St. Louis on the Atlantic coast.

Set against this, the Government of Guinea plans to make Conakry Port a fulcrum of cooperation with Mali. Conakry Port (the main commercial port) has a 350 km seaboard in deep waters, and the Kamsar Port (the largest mineral port), are the main hubs in the Guinean transport system. Conakry Port handles 95% of Guinea’s imports and exports, excluding ore. Kamsar Port, specially built to transport bauxite from Boke, handles more than 9 million tonnes of that mineral annually on average. Several initiatives have been taken: i) putting at Mali’s disposal of a section of the port for foreign trade, (ii) the coordinated financing of the Kankan-Kouremale-Bamako road which is a major section of the external access corridor for Mali, and (iii) the ongoing third Conakry Port expansion studies funded by German cooperation. The investment in the road sub-sector could therefore undermine attempts to foster rail/inland water transport corridors.

**2.3 Lake Volta**

The Lake Volta Transport Company (VLTC) was incorporated in 1970 to provide North-South water borne transport for persons and freight on the Volta Lake. The Company operates a fleet of passenger vessels, cargo ships and barges, totalling 19 sailing vessels.

The Company operates in two main areas:

- North-South Services
- Tramp Services
- Ferry-Crossing Services

**North-South Services**
Pusher tugs with cargo barges constitute pusher trains which can transport 2,300 tonnes of cargo per voyage. Dry cargo namely Lint Cotton, Cotton Seeds, Shea nuts are shipped from the agricultural North to the industrial South for export or for local markets. Additionally, Cement, industrial products and general cargo are shipped from South to the North. A pusher tug with tanker barges of 1,440m capacity sails regularly to Buipe with fuel (kerosene, diesel and petrol) for markets in the Northern, Upper West, Upper East Regions and the northern parts of Brong Ahafo Region.

**Tramp Services**

The passenger/cargo vessel *MV Yapei Queen* has air-conditioned cabins and restaurant facilities and sails weekly from Akosombo to Yeji with stops at various intervening ports including Kete Krachi. The vessel returns with agricultural products such as yams, beans, groundnuts, fish etc.

**Ferry-Crossing Services**

Ferry services operate at Yeji (Brong- Ahafo), Kete-Krachi and Dambai, both in the Volta Region and Adawaso in Afram Plains. These ferries serve as bridges where the Lake has cut across the road network. Without these services, communities around the ferry stations will be cut off from the rest of the Country. Both passengers and cargo are transported at the stations.

VLTC vessels are designed to ship bulk cargo. The company can ship at a go 2,300 tonnes of solid cargo from Akosombo to Buipe and vice versa. VLTC has partnerships with road truckers in order to provide seamless operations on lake and land.

VLTC’s transport costs are much lower than by road, and has an accident-free history since its inception in 1970.

Given the commodities transport and local nature of the traffic, Lake Volta does not offer significant potential for regular container services.

### 3 Central Africa

#### 3.1 River Congo

With a length of 4,700 km, the Congo River it is the continent’s second longest river, after the Nile. It rises in the highlands of northeastern Zambia between Lakes Tanganyika and Nyasa (Malawi) as the Chambeshi River at an elevation of 1,760 metres above sea level and at a distance of about 700 km from the Indian Ocean. Its course then takes the form of a giant counterclockwise arc, flowing to the northwest, west, and southwest before draining into the Atlantic Ocean at Banana (Banane) in the Democratic Republic of the Congo. Its drainage basin, covering an area of 3,457,000 square km, takes in almost the entire territory of that country, as well as most of the Republic of the Congo, the Central African Republic, eastern Zambia, and northern Angola and parts of Cameroon and Tanzania.

With its many tributaries, the Congo forms the continent’s largest network of navigable waterways. Navigability, however, is limited by an insurmountable obstacle: a series of 32 cataracts over the river’s lower course, including the Inga Falls. These cataracts render the Congo unnavigable between
the seaport of Matadi, at the head of the Congo estuary, and Malebo Pool, a lakelike expansion of the river. It was on opposite banks of Malebo Pool—which represents the point of departure of inland navigation—that the capitals of the former states of the French Congo and the Belgian Congo were founded: on the left bank Kinshasa (formerly Léopoldville), now the capital of the Democratic Republic of the Congo, and on the right bank Brazzaville, now the capital of the Republic of the Congo.

The Congo basin has a navigable network of 12,000 km, covering nearly 4 million sq km across nine countries. The Congo River traverses the Democratic Republic of Congo (DRC), linking two of its main cities (Kinshasa and Kisangani), while its many tributaries criss-cross much of the country. The 12,000 km of the Congo River and its tributaries are navigable with a certain amount of regular dredging. The capital and maintenance costs per kilometer of navigable waterway are a fraction of those per kilometer of road. Even under today’s less than ideal navigation conditions, the cost of moving freight along the Congo River—around 5 cents per tonne-km—is only a third of the cost of moving freight by road or rail. Although the river network does not cover all routes of interest, and river transport is comparatively slow, it has clear economic advantages and the potential to recover its historically large role in the DRC’s transport network.

The DRC has more navigable rivers and moves more passengers and goods by boat and ferry than any other country in Africa. Kinshasa, with 7 km of river frontage occupied by wharfs and jetties, is the largest inland waterways port on the continent. However, much of the infrastructure—vessels and port handling facilities—has suffered from poor maintenance and internal conflict.

The 1000-kilometre Kinshasa-Kisangani route on the Congo River is the longest and most highly trafficked. It is operated by river tugs pushing several barges lashed together, and for the hundreds of passengers and traders these function like small floating towns. Rather than mooring at riverside communities along the route, traders come out by canoe and small boat alongside the river barges and transfer goods on the move.

Most waterway routes do not operate to regular schedules. It is common for an operator to moor a barge at a riverside town and collect freight and passengers over a period of weeks before hiring a river tug to tow or push the barge to its destination.

Kinshasa is linked to Brazzaville (Republic of the Congo) by regular boat and ferry services 3.5 km across the Congo River. Other commercial services operate from Kinshasa and other river ports via the Ubangui River to Bangui (Central African Republic).

The DRC and Congo’s respective capitals—Kinshasa and Brazzaville—face one another across Stanley Pool (Pool de Malebo), downstream of which the Livingstone Falls block navigation to the Atlantic Ocean. Numerous communities in the sparsely-populated interior depend upon river transport, both for export of produce and for importing goods. During a prolonged period of civil unrest prior to the peace accord of 2003, the Port of Brazzaville sustained extensive damage to dockside infrastructure; its problems further compounded by under-investment and continuing difficulties in maintaining navigable depths in the silt-laden Port basin; quays and channels being further obstructed by numerous wrecks.
Despite the restoration of peace, the deteriorating reliability and security of the rail link with the coast, the Chemin de Fer Congo-Océan, continued to hamper recovery in freight traffic volumes; notably in the Port's traditional cargo of timber - high-quality hardwoods harvested from the vast rainforests of the interior, and a major export earner for the Congo. The European Union, through its external aid instrument, the Fonds européen de développement (FED), proposed a programme of support to the Republic of Congo, to enable the progressive revitalisation of the Port of Brazzaville as a key element in regeneration and development of both national and regional (Congo basin) economies.

Maintenance of the navigability of the Congo fluvial network is shared between the pays riverains - Democratic Republic of Congo, Republic of Congo and Central African Republic - these last two through a bi-laterally sponsored agency, Service Commun d'Entretien des Voies Navigables (SCEVN). SCEVN, with operational bases in Brazzaville and Bangui (CAR), carries out survey, dredging and maintenance works on two of the major tributaries - the Oubangui and the Sangha - as well as maintaining navigation aids on certain reaches of the Congo itself, and dredging within the Port basin at Brazzaville.

The Congo Basin three principal routes—all of which converge on the downstream terminus at Kinshasa on the Malebo Pool—run from Kisangani, from Ilebo on the Kasai, and from Bangui on the Ubangi. The amount of goods transported by water (mainly agricultural products, wood, minerals, and fuel) is very modest, usually not reliable year-round.

In principle, the waterway system could significantly contribute to a multi-modal transport network serving the region, particularly given low associated transport costs of US$0.05 per ton-kilometer versus US$0.15 per ton-kilometer for road or rail freight in Central Africa, albeit at significantly lower speeds. In practice, however, the river transportation falls short of the role it could play in overall economic development of the Congo Basin. In fact, since the 1950s, river transportation has actually declined because of an outdated and insufficient infrastructure, inadequate maintenance, The Congo basin system suffers from a poor regulatory framework, and numerous nonphysical barriers to movement. As a result, despite vast potential, the waterway system remains a marginal transport mode in the Congo Basin.

Recognizing this untapped potential, the governments of Cameroon, Central African Republic, Democratic Republic of Congo, and the Republic of Congo have found it imperative to jointly manage the resources of the Basin. In 1999, under the authority of the Executive Secretary of the Economic and Monetary Community of Central Africa (ECCAS), the four governments established the International Commission for the Congo-Oubangui-Sangha Basin (Commission Internationale du Bassin Congo-Oubangui-Sangha, CICOS). The immediate objective of CICOS is to improve cooperation among its member states through improved communication via the Congo River and its tributaries; a longer-term objective is to promote integrated water resources management (IWRM) in order to enhance development and alleviate poverty in the member states.

### 3.2 Other Waterways in DRC

The other inland waterways in the DRC are:
• Goma and Bukavu on Lake Kivu to Gisenyi, Kibuye and Cyangugu in Rwanda;

• Kalemie, Kulundu-Uvira and Moba on Lake Tanganyika to Kigoma (Tanzania), Bujumbura (Burundi) and Mpileungu (Zambia);

• Kasenga and Pweto on the Luapula River-Lake Mweru system to Nchelenge, Kashikishi and Kashiba in Zambia;

• Lake Albert: two small ports on the DRC side, Kisenye near Bunia and Mahadi-Port in the north can link to Ugandan ports at Butiabo and Packwach (served by Uganda Railways) on the Albert Nile, which is navigable as far as Nimule in southern Sudan. Water transport is conducted principally in small craft, with little commercial water transport;

• Lake Edward: located within national parks, settlements are small, water transport is conducted principally in small craft, and commercial water transport is absent; and

• The middle Congo River and its tributaries from the east are the principal domestic waterways in the DRC, with two principal river routes from Kinshasa to Mbandaka and Kisangani on the River Congo, and Kinshasa to Ilebo on the Kasai River.

The most-used domestic lake waterways are:

• Kalemie to Kalundu-Uvira on Lake Tanganyika
• Bukavu to Goma on Lake Kivu
• Fimi River to Inongo on Lake Mai-Ndombe
• Irebu on the Congo to Bikoro on Lake Tumba
• Kasenga to Pweto on the Luapula-Mweru system
• Kisenye to Mahadi-Port on Lake Albert.

The main inland ports in DRC are:

• Bumba - river
• Ilebo – river and railhead
• Kindu – river and railhead
• Kinshasa – river and railhead
• Kisangani – river and railhead
• Mbandaka - river
• Kalemie – Lake Tanganyika and railhead
• Kalundu-Uvira – Lake Tanganyika
• Moba – Lake Tanganyika
• Bukavu – Lake Kiva
• Idjwi – Lake Kivu
• Goma – Lake Kivu

The ports of and Brazzaville offer the most potential as points on multi-modal transport corridors. Since the River Congo is not navigable to the Atlantic Ocean the Matadi-Kinshasa Railway offers an alternative mode. It runs from Matadi Harbour to Kinshasa via Songolo, Kimpese, Mbanza-Ngungu and Kasangulu, and is operated by ONATRA. This line is a bypass of the Livingstone Falls on the Congo River, known as a portage railway. The line lost traffic to road transport when the Matadi-Kinshasa road was re-established in 2000, and it is now planned to revitalize it with Chinese help. To this end an agreement was signed in July 2006 between ONATRA and a Chinese company (CMIC) to renovate the track, trains, telecommunications, signal system and electric supply. However, no train services have operated since August 2012 and by 2014 rehabilitation works had still not started.

The Congo–Ocean Railway (COR) links the Atlantic port of Pointe-Noire (in the Republic of Congo) with Brazzaville, a distance of 502 kilometre, bypassing the rapids on the lower Congo River. From Brazzaville river boats are able to ascend the Congo River and its major tributaries, including the Oubangui River to Bangui.

As of 2012 the railway was regularly operating freight and passenger services along the length of the line despite the poor state of the track. In 2012 a luxury passenger train, La Gazelle, using Korean manufactured passenger cars was introduced and as of 2014 it operated between Pointe-Noire and Brazzaville every other day and was scheduled to take 14–16 hours to complete the 502 kilometres journey.

4 EAST AND SOUTHERN AFRICA

4.1 Shire-Zambezi

The Zambezi is the fourth-longest river in Africa, the longest east flowing river in Africa and the largest flowing into the Indian Ocean from Africa. The area of its basin is 1,390,000 square kilometres, slightly less than half that of the Nile. The 2,574-kilometre-long river rises in Zambia and flows through eastern Angola, along the eastern border of Namibia and the northern border of Botswana, then along the border between Zambia and Zimbabwe to Mozambique, where it crosses the country to empty into the Indian Ocean.

The Zambezi’s most noted feature is Victoria Falls. Other notable falls include the Chavuma Falls at the border between Zambia and Angola, and Ngonye Falls, near Sioma in Western Zambia. There are two main sources of hydroelectric power on the river, the Kariba Dam, which provides power to Zambia and Zimbabwe, and the Cahora Bassa Dam in Mozambique, which provides power to Mozambique and South Africa. There is also a smaller power station at Victoria Falls. Because of the falls and man-made dams, the river’s navigability is frequently interrupted and so has never been an important long-distance transport route.
The river was used for transport by canoe along the river rather than on the unimproved roads which are often in very poor condition due to being regularly submerged in flood waters, and many small villages along the banks of the river are only accessible by boat. In the 1930s and 40s a paddle barge service operated on the stretch between the Katombora Rapids, about 50 kilometres (48km) upstream from Livingstone, and the rapids just upstream from Katima Mulilo. However, depending on the water level, boats could be paddled through, or they could be pulled along the shore or carried around the rapids, and teams of oxen pulled barges 5 kilometres over land around the Ngonye Falls.

The development of the Shire–Zambezi Waterway Project, was adopted as a priority project by both the SADC and COMESA. The overall objective of the project is to develop a waterway at the heart of regional transport corridors, to foster regional integration and open up new outlets to the sea for SADC countries. A feasibility study is currently underway for a proposed $6-billion scheme.

A route has been identified for the 340-km-long waterway, stretching from Malawi's Nsanje port to Chinde, in Mozambique. The two rivers are navigable for 4.2 months a year without dredging but the total dredging requirements for all-year navigation have yet to be identified. An inland port with a 300m dock has been constructed at Nsanje in Malawi, under a build-operate-transfer concession by Mota Engil. A lack of agreement between the Governments of Malawi and Mozambique over navigable rights on the Shire has meant that no vessel has yet docked at the port. The port is relatively close the Sena railway line which could provide access to the north (Blantyre and Lilongwe), but this line was closed south of Makhanga over a decade ago due the washaway of the Chiromo Bridge, and more recently in January 2015, floods washed away parts of the line further to the north.

If the political issues are solved then maritime vessels could directly access Nsanje and tranship to road transport in the medium term. In the longer term, the port could be connected by rail to the network in Malawi which would allow multimodal transport through Malawi to Zambia (Chipata).

### 4.2 Lake Tanganyika

Lake Tanganyika is the second largest freshwater lake in the world by volume, and the second deepest, in both cases, after only Lake Baikal in Siberia. It is also the world's longest freshwater lake. The lake is divided among four countries – Tanzania, Democratic Republic of the Congo (DRC), Burundi, and Zambia, with Tanzania (46%) and DRC (40%) possessing the majority of the lake. The water flows into the Congo River system and ultimately into the Atlantic Ocean.

Lake Tanganyika is situated within the Albertine Rift, the western branch of the East African Rift, and is confined by the mountainous walls of the valley. It extends for 676 km in a general north-south direction and averages 50 km in width. The lake covers 32,900 km², with a shoreline of 1,828 km, a mean depth of 570 m and a maximum depth of 1,470 m in the northern basin. It holds an estimated 18,900 cubic kilometres of water.

There are two major maritime transport routes on Lake Tanganyika, as follows:

1) Regional Maritime Trunk Routes (including transport of transit cargo). At present, only the Bujumbura – Mbulungu (Kasanga) route exists. Before, the Kigoma – Kalemie Route was active but this route has declined because of the poor performance of the TRL railway.
2) Coastal Maritime Routes connecting cities and villages on the Lake. These routes are the east-west maritime routes crossing the lake and the north-south maritime routes of a short distance connecting the cities and villages along the shore. As there is no development plan of roads as access to the small villages on the shore at present, the coastal maritime transport route will remain as they are for a considerable period of time. They are essential to provide a lifeline to the people inhabiting the shore.

The reasons for the decline of Kigoma–Bujumbura route as well as the east-west maritime route between Kigoma–Kalemie are considered below.

Nebulous Future of TRL Railway as the rehabilitation program of the TRL railway has not been concluded and the upgrading of the trunk roads has been accelerated in Tanzania, the cargo transport has been shifting to the roads from the railway. As a result, the following transport routes by road have replaced the transport route via Kigoma:

(a) From Dar es Salaam via Mbeya to the south-western shore of Lake Tanganyika.

(b) From Dar es Salaam via the mountainous land to the north-western shore of Lake Tanganyika including Burundi - Deterioration of Kalemie Port.

Facilities and infrastructures of Kalemie Port have not been refurbished at all since they were installed or built. In addition, because of siltation, the navigation channel has become too shallow for a large cargo ship to enter the port.

**Vessels**

MV *Mwongozo* is a mixed passenger and cargo ferry on Lake Tanganyika operated by the Marine Services Company Limited (MSC). MSC was established in 1997 from TRC’s inland shipping division. *Mwongozo* can carry up to 800 passengers and 80 tons of cargo.[1] Her accommodation includes open sleeping areas, individual cabins and a passenger dining saloon. She can take cars and small trucks on her forward deck. *Mwongozo* normally plies a daily route between Kigoma and Bujumbura. The journey takes about 14 hours. MSC's other Lake Tanganyika ferry, MV *Liemba*, operates the route to Zambia.

**Cargo and Passengers at Kigoma**

In 2011/12 Kigoma handled 25,000 passengers. This declined to 20,000 in 2012/13. Cargo at the port is listed in Table 4.1.

<table>
<thead>
<tr>
<th></th>
<th>2012/2013</th>
<th>2011/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMPORTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break Bulk</td>
<td>1,230</td>
<td>25,596</td>
</tr>
<tr>
<td>Liquid Bulk</td>
<td>15,309</td>
<td>15,379</td>
</tr>
<tr>
<td>Sub - Total</td>
<td><strong>46,539</strong></td>
<td><strong>40,975</strong></td>
</tr>
<tr>
<td><strong>EXPORTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break Bulk</td>
<td>19,222</td>
<td>23,540</td>
</tr>
</tbody>
</table>
The transport business on Lake Tanganyika is expected to be developed by large ship transporters who are engaged in the north-south transport on the regional trunk route using the cargo ships of 350 tons to 1500-ton class, and the small ship transporters who are engaged in the transport on the local coastal routes using wooden cargo ships of 150-ton class or less. The profit source for the large ship transporters will come from the long distance transport. Calling to Kigoma or Kalemie will make sense for them only when their ships are engaged in cargo transport on the north-south regional trunk route. Their major concern is the development of such a transport network that may vitalize the north-south regional trunk route, as they can maximize and stabilize their profits from the development. They are also interested in alternative transport routes they can use in case social unrest takes place on one route, although the unrest has currently been subsiding in the countries surrounding Lake Tanganyika.

### 4.3 Lake Victoria

#### Geography

With a surface area of 68,800 sq km, Lake Victoria is Africa's largest lake. The lake receives most of its water from direct precipitation. Its largest influent is the Kagera River, the mouth of which lies on the lake's western shore. The only river to leave the lake (flowing north) the White Nile (known as the "Victoria Nile"), leaves at Jinja, Uganda, on the lake's north shore.

Lake Victoria is relatively shallow. It has a maximum depth of 84 metres and an average depth of 20 meters. It has a length of 337 km and a width of 240 km, and its surface area is approximately 69,500 sq. km and is shared by Tanzania, Uganda and Kenya (49 percent, 45 percent and 6 percent respectively). It is situated in a wide depression between the east and west Great Rift Valley and has a heavily indented shoreline of 3,440 km length, with a shallow gentle gradient, making it extremely sensitive to moderate changes in level.

The shoreline’s complex topography plays a role in the development of the road network around the lake. Historically, marine transport on the lake, together with the rail network, played the primary role in the transportation of cargo and passengers to and from the land-locked countries. In so doing, it formed an important component of an intermodal supply chain along the Central and Northern Corridors linking to both Mombasa and Dar es Salaam ports. Kisumu, in Kenya, was established as a shipbuilding and assembly center before the end of the First World War, with ferries and cargo ships travelling to Uganda. By the mid-Twentieth Century, the East African Railways and Harbours Corporation (EARHC) operated regular sailings from Kisumu to Port Bell in Uganda and Mwanza in Tanzania, using rail ferries that carried rail wagons loaded and unloaded directly from/to rail tracks in...
the three ports. Smaller ports Jinja (Uganda), Musoma, Bukoba and Kemondo Bay (Tanzania) were also served. The breakup of the EARHC in 1977 started the decline in transport services on the lake, leading to the gradual disintegration of the services inherited by the three railway companies. The development of the road network around the Lake further undermined the competitive position of transport services, on some routes.

Traffic

The demand for lake transport has declined over the last 10 years reflected a combination of unreliable or broken rail connections to the maritime ports, and unreliable ferry operations across the lake itself. Cargo volumes on the lake were increasing until 2005, but then fell dramatically as a result of the drop in international traffic. In 2000 around 80 percent of TPA’s Lake Victoria cargo was international trade with Uganda and Kenya, most of it transit traffic from Dar es Salaam to Uganda. By 2010 this had virtually disappeared, with international trade averaging only 10,000 tonnes p.a. between 2010-12, compared with 240,000 tonnes in 2001 and 375,000 tons in 2005.

The loss of international traffic has been due to two inter-related factors:

(i) A reduction in rail services between Mwanza and Dar es Salaam following the concessioning of Tanzania’s TRC rail services to RITES in 2006, and the subsequent complete breakdown in the service; and

(ii) a reduction in the number of rail ferries operating on Lake Victoria from five to one following an accident between two rail ferries in 2005, and the subsequent withdrawal of two others for safety reasons.

As a result, Mwanza port handles about 15 percent (156,000 tons in 2012) of its peak demand of 10 years ago. Port Bell handled over 400,000 tons of cargo in 2004 but currently handles a range of 10,000 to 80,000 tons per annum, depending on the ad-hoc needs of a few clients. The commodities carried on the lake now include cement, fertilizer and consumer goods, such as cottonseed, wheat flour, fish and coffee.

Ports

Uganda

Port Bell is located at the head of the Murchison Bay, south-east of Kampala. The port was constructed in the 1960’s as a rail wagon terminal, though has limited facilities for berthing other types of vessels. The rail wagon terminal is constructed on artificial (reclaimed) land at the head of which is a pier some 65 meters long and 20 meters wide, which acts as a causeway to the rail wagon loading dock. The latter consists of a link-span and hoisting towers (designed to raise and lower the bridge depending on the freeboard of the ferry and differences in water levels), guide walls, and berthing dolphins for mooring the stern loading/offloading. The pier is a sheet piled wall construction with a reinforced concrete deck, the eastern part of which can be used for loading/offloading ships. Cargo traffic through Port Bell is listed in Table 4.2.

<table>
<thead>
<tr>
<th></th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Jinja port was also constructed in the 1960’s as a rail-wagon terminal, though also has some facilities for berthing other types of vessels. The rail-wagon terminal at Jinja is located 80 km east of Kampala on the north shore of the Nile River which flows out of the lake. The rail-wagon terminal is of similar construction to that at Port Bell, except that the concrete pier is some 40 meters long and 14 meters wide. There is access to the port by both road and rail.

**Tanzania**

Mwanza consists of two ports: Mwanza South and Mwanza North respectively. Mwanza South Port is the main port for all cargo specific operations in the southern (Tanzanian) portion of the lake, whilst Mwanza North port is the passenger terminus, located on the south eastern shore of Massanga Bay adjacent to Mwanza city. Mwanza South is located within a natural shallow bay on the eastern shore of Mwanza Gulf. It is protected from the open waters of the lake by Capri Point, a high rocky promontory. Port facilities are grouped in a wide area of land some 8.5 ha in size. Most of this area is either unused (the port has little paved hard-standing or storage space) or is occupied by railway lines where railway wagons can be held in readiness for shunting onto ferries via the linkspan, constructed in 1964. The main quay, constructed in the late 1930’s, is 250 meters long and consists of a sheet piled wall with a reinforced concrete deck. A rail line loops along the quay, with two spurs, one (disused) running along the cope edge and the other fronting the goods sheds. The southern end of the quay (adjacent to the link-span) is currently used to load/ discharge oil products to tankers/ships. The quay apron is unusually constructed on a two tier level with a difference of 0.7 meters in height over a length of 190 meters. The upper level fronting the cargo and transit sheds is some 7 meters in width and this reduces the effective working area on the quayside to some 5 meters in width, greatly hindering horizontal transfer operations. Recent block work modifications at the northern end of the quay have raised the apron to similar levels over a length of 60 meters. This area is currently used as a docking and maintenance wharf and provides hard-standing storage and yard space. The port has a dry dock (2,100 tons lifting capacity) that can be used for ship repair and/or construction.

Mwanza North port is the passenger terminus, located immediately adjacent to Mwanza city. Despite the location direct road access has been closed off and road traffic accessing and egressing the port is forced to deviate on an unpaved road close to the Kamanga Ferry terminal, west of the port. Port facilities have been constructed on a promontory of artificial land (developed in the late 1930’s) and consist of two berths: a main berth of 82 meters in length, and a secondary berth of some 50 meters in length. Both berths are again of a sheet piled wall design with a reinforced concrete deck. Part of the secondary berth and apron has been raised 0.6 meters in height. The port has a central passenger/cargo shed and is served by a rail spur that terminates on the main berth.

<table>
<thead>
<tr>
<th></th>
<th>2012/2013</th>
<th>2011/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMPORTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break Bulk</td>
<td>331</td>
<td>5,498</td>
</tr>
</tbody>
</table>

Table 4.2. Traffic through Port Bell
Table 4.3. Cargo through Mwanza Port (tonnes)

<table>
<thead>
<tr>
<th></th>
<th>Liquid Bulk</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPORTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break Bulk</td>
<td>790</td>
<td>5,498</td>
<td></td>
</tr>
<tr>
<td><strong>Sub - Total</strong></td>
<td>459</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Inwards</strong></td>
<td>262,266</td>
<td>111,911</td>
<td></td>
</tr>
<tr>
<td><strong>Sub - Total</strong></td>
<td>96,235</td>
<td>85,616</td>
<td></td>
</tr>
<tr>
<td><strong>Outwards</strong></td>
<td>1,600</td>
<td>7,259</td>
<td></td>
</tr>
<tr>
<td><strong>Sub - Total</strong></td>
<td>1,600</td>
<td>7,259</td>
<td></td>
</tr>
<tr>
<td><strong>Outwards</strong></td>
<td>262,266</td>
<td>111,911</td>
<td></td>
</tr>
<tr>
<td><strong>Sub - Total</strong></td>
<td>96,235</td>
<td>85,616</td>
<td></td>
</tr>
<tr>
<td><strong>Inwards</strong></td>
<td>1,600</td>
<td>7,259</td>
<td></td>
</tr>
<tr>
<td><strong>Sub - Total</strong></td>
<td>1,600</td>
<td>7,259</td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>358,501</td>
<td>197,527</td>
<td></td>
</tr>
<tr>
<td><strong>Outwards</strong></td>
<td>360,891</td>
<td>210,284</td>
<td></td>
</tr>
</tbody>
</table>

Bukoba port serves as the gateway to the region west of Lake Victoria and is the second largest port after Mwanza, and is situated on the western shore of the lake. The port is located south of the city. It is served by a regular connection via Kemondo Bay to Mwanza, three days per week. The port has three cargo sheds and one passenger shed. The city is also served by ground transport to Kampala every day. Because of the well-developed road network on the western shore of Lake Victoria, bus transport operated by the private sector is competitive between Bukoba and Mwanza. The access road and port area are in need of rehabilitation.

Musoma port is located in Mara Bay, a large sheltered bay. The original port pier was constructed on leeward side of Musoma Point, a narrow peninsula that extends into the lake on the southern shore of the bay. The existing port, constructed between 1966 and 1968, is located south east of Musoma Point, on a small headland adjacent to the town. Port facilities, constructed on artificial land consist of a rail wagon terminal with a fixed link-span bridge, shore abutment, long and short guide walls. The opposite face of the long guide wall forms the passenger berth, which is 100 meters in length with an apron 4.5 meters in width. The cope height is 3 meters. Perpendicular to the landward end of the passenger berth is a general cargo berth of 55 meters length, a paved apron area of 9.5 meters width and a cope height of 2.1 meters. All wagon ferry guide walls, passenger and general cargo berths are of steel sheet pile wall construction with a reinforced concrete deck. Port land (covering some 3 ha.) is dominated by railway track required to load/offload and shunt rail wagons within the yard area. Due north west of the existing port site, adjacent to Musoma Point, there are two offshore mooring dolphins for berthing tank-ships for ship to shore petroleum transfers.

**Kenya**

The port of Kisumu is located in the north-eastern corner of Lake Victoria, on the southern shore of a small sheltered bay, fronting Kenya’s third largest city. Port facilities are grouped in a wide area of land some 20 hectares in size, with reasonable although unpaved access. Most of this area is occupied by dockyard facilities and rail sidings, the latter run to the main-quay or the rail-wagon terminal located at its western end. The wharf is 900 meters long, of which about 500 meters is currently operable. It is a pile supported structure with an 18 inch thick facing wall, added when the water level rose. The main jetty is some 260 meters in length with an apron about 12 meters wide, and in need of rehabilitation. A single warehouse of 80 meters by 16 meters is provided on the main quay, behind which is a paved open storage are of approximately 3,000 m2. The rail wagon terminal is constructed
on artificial (reclaimed) land almost perpendicular to the main quay. It consists of a link-span, hoisting towers, guide walls and inner and outer mooring dolphins (connected by a suspended walkway).

There is a working dry dock of 100 meters by 30 meters, with a working draft of 6 meters. This and the linkspan were ‘considered assets’ of Rift Valley Railways (RVR), now passed to the Kenya Port Authority (KPA). Siltation has led to a reduction in the amount of available wharf space to about 120 meters, and the entire port area of 3 sq. km. needs dredging to a depth of 6 meters. There is also a problem with water hyacinth. In 2010 the port handled around 7,000 tons of cargo per month, mainly edible oils transported in 20 liter containers. There is no cargo handling equipment and all cargo is moved manually. Given the lack of functioning rail connection between Nakuru and Kisumu (217 km), the potential would appear to lie with cargo to/from the other lake ports, and passenger traffic. The GoK have commissioned transaction advisors to prepare a business case for a potential concession for the port. It is expected that public investment will be necessary to facilitate the concession.

The port is operating at a mere 20% of its capacity with infrequent lake transport and the lack of container port facilities limiting the ability for businesses to use the lake. Additionally, the low water level by the port restricts the size of boats able to access the port. The poor condition of roads outside of Kisumu – particularly the main artery connecting the city with Nairobi – is by far the largest infrastructure constraint impacting business activity in the region.

It is proposed to develop Kisumu Port into a modern commercial port on a Build-Operate-Transfer (BOT) basis. The goal is to develop the port and provide the requisite physical and super infrastructure. The vision is also to develop a mechanism to effectively manage the port and ensure its efficient utilization. Private sector parties will be invited to design, finance, build, operate and transfer whilst it is anticipated that the Kenya Port Authority will own the port and be the landlord.

In March 2015 the Kenya Treasury’s Public–Private Partnership Unit (PPPU) announced a consortium led by Maritime & Transport Business Solutions (MTBS) of The Netherlands had been appointed to advice on the planned construction of a modern $220 million port in Kisumu.

**Services on Lake Victoria**

Historically, Marine Service Company Limited (MSCL) - formally the marine division of Tanzania Railways Corporation, and the Uganda and Kenya Railway Corporations, together carried the majority of shipping on the lake. Their rail-wagon ferries (with a combined cargo deadweight tonnage of 4,400 tons) had a monopoly on the carriage of rail cargo between the three East African States. However, given the decline in capacity on the central railway, the majority of cargo between the lake ports is now transported by private vessels. MSCL still operates the passenger ferry services operating from Mwanza to other points in Tanzania. However, consistent rules for the safe design, construction and operation of vessels need to be developed and respected in all riparian countries.

RMS Victoria was built in 1959 and reassembled for the East African Railways and Harbours Corporation (EAR&H) ship at Kisumu in 1961. When the ship was commissioned, Queen Elizabeth II granted her the "Royal Mail Ship" designation: the only EAR&H ship to receive this distinction. MV Victoria is MSCL’s largest cargo-passerger ship, and is capable of carrying 200 tons of cargo and 1,200 passengers
The train ferries MV *Umoja* and MV *Uhuru* are sister ships built in 1965. Kenya operated *Uhuru*, but she has been suspended from service since 2007. In 1977 EARH was dissolved and its assets divided between Kenya, Tanzania, and Uganda. *Uhuru* was transferred to the new Kenya Railways Corporation and *Umoja* and *Victoria* to the new Tanzania Railways Corporation.

Uganda Railways Corporation operated three train ferries on Lake Victoria: MV *Kabalega*, MV *Kaawa* and MV *Pemba*. In 2005, *Kabalega* and *Kaawa* collided. Although *Kaawa* managed to return to port, a few hours after the collision, *Kabalega* sank about 15 km southeast of the Ssese Islands. After the collision both *Kaawa* and *Pemba* were suspended from service. In 2012 *Kaawa* was refurbished and returned to service. However, it carried far less cargo now than 10 years ago.

**Safety on Lake Victoria**

There are no reliable nautical charts currently available on Lake Victoria (available charts date to 1929), and no functional aids to navigation, although the Lake Victoria Basin Commission (LVBC) have recently procured some with support from the World Bank, and there is little or no effective dissemination of information in respect of safe navigation, weather, and environmental protection. In addition, while all registered ships on Lake Victoria are provided with radios, none of the lake ports has any maritime assistance services of any kind. This means that there is no general weather synopsis, storm or other navigational warnings given to ships departing from any of the lake ports. Neither is the lake endowed with landfall lights, beacons, buoys, leading lines or other facilities that delineate headlands, ship routes, known dangers (including wrecks) or the fairways and approaches to ports. The LVBC is planning to establish a Maritime Rescue Coordination Centre in Mwanza North, funded by the African Development Bank (AfDB). The plots have been already acquired. In addition, the LVBC is finalizing the concept for a maritime communication system, which is also to be funded by AfDB.

TRC's Marine Division introduced the ferry MV *Bukoba* in about 1979, and the passenger and cargo ship MV *Serengeti* in 1988. In 1996, *Bukoba* sank 56 km off Mwanza. She was carrying many more passengers than she was certificated for, and at least 800 people were killed.

On 28 April 2006, MV *Nyamageni* capsized. She was a cargo and passenger ferry owned by the Dynamic Cotton Ginnery of Mwanza in Tanzania. She was carrying more than forty passengers, 28 of whom were feared dead.

**Central Corridor**

The rehabilitation of the Central Corridor railway line between Dar es Salaam and Isaka (970 km) is planned under the Tanzania Intermodal and Rail Development Project, with additional support from Japanese International Cooperation Agency (JICA) and the European Investment Bank (EIB). A reliable railway connection between Lake Victoria and Dar es Salaam is considered essential to promote migration of freight and passenger traffic from road to rail, opening up the second multimodal corridor to a maritime port for the landlocked countries, but also to stimulate the development of marine traffic between Tanzania and the lake ports in Uganda and Kenya. It is proposed to develop a port at Musoma (Tanzania), and new port at Bukasa near Kampala in Uganda, both to be connected by rail.
Legal

The Lake Victoria Transport Act was passed by the East African Community in 1997 to make provision for the Commission to regulate maritime safety and security, to make provision for the construction, survey, registration and licensing of all vessels used on the Lake, for the safety of passengers and cargo, for the competency of masters and crew and for other related matters. The provisions of the Act need to be enforced by member countries, but these have not fully domesticated the legislation as yet.

Potential

There is considerable potential for the development of inland water transport on Lake Victoria due to:

(i) the catchment area of the lake contains a growing population of nearly 35 million people;
(ii) a number of towns and villages around the lake do not have good road access, and are currently being served by a poorly regulated private sector fleet;
(iii) for some routes, the lake option will remain the most direct and efficient route, with a reliable service, with the average freight tariff on Lake Victoria about 7-8 U.S. cents per ton-km which is expected to fall further, and which is competitive with road transport on roads circling the lake for certain types of cargo;
(iv) the rehabilitation of the railway infrastructure and the revitalization of railway services on the central railway line particularly offers the landlocked countries the potential of a secure, potentially cheaper, intermodal service from the maritime port; and
(v) the reintroduction of such a service provides an alternative option, in the event of disruption, for traffic currently using Mombasa from Uganda, DRC and Rwanda.

4.4 Lake Malawi

Table 4-1 Passengers and Cargo, Lake Malawi

Lake Malawi is between 560 kilometres and 580 kilometres long, and about 75 kilometres wide at its widest point. The total surface area of the lake is about 29,600 square kilometres. The lake has shorelines on western Mozambique, eastern Malawi, and southern Tanzania. The largest river flowing
into it is the Ruhuhu River, and there is an outlet at its southern end, the Shire River, a tributary that flows into the very large Zambezi River in Mozambique.

**Ports in Malawi**

Port operations are concessioned to the Malawi Ports Company. Conditions are shown in Table 4.5. Passenger and cargo throughput are shown in Table 4.4.

<table>
<thead>
<tr>
<th>Port</th>
<th>Location</th>
<th>Machinery</th>
<th>Storage Area</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilumba</td>
<td>Karonga</td>
<td>1 x 35 mt gantry crane 1 x 20 mt mobile crane 1 x 6 mt forklift 5 x 3 mt forklifts 1 x tractor 1 x trailer</td>
<td>Dry - 800m² Wet - 583,000 Litres</td>
<td>Old and dilapidated equipment</td>
</tr>
<tr>
<td>Chipoka</td>
<td>Salima</td>
<td>1 x 35 mt gantry crane 4 x 3 mt forklifts</td>
<td>Dry - 800m² Wet - 923,000 litres</td>
<td>Old and dilapidated equipment Rehabilitation in 2013</td>
</tr>
<tr>
<td>Nkhata Bay</td>
<td>Nkhata Bay</td>
<td>1 x mobile crane 1 x tractor 1 x trailer</td>
<td>Dry - 500m² Wet - N/A</td>
<td>Old and dilapidated equipment Rehabilitation in 2013</td>
</tr>
<tr>
<td>Monkey Bay</td>
<td>Mangochi</td>
<td>-</td>
<td></td>
<td>Old and dilapidated equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Accessibility</th>
</tr>
</thead>
</table>
| Chizumulu Island | • Reached by steamer from Nkhata Bay port
|                 | • Illala accesses Chizumulu
|                 | • Small boats and dhows connect Likoma and Chizumulu                         |

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonne-km (million)</th>
<th>Passenger-km (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/12</td>
<td>5.7</td>
<td>1.7</td>
</tr>
<tr>
<td>2012/13</td>
<td>5.9</td>
<td>1.7</td>
</tr>
<tr>
<td>2013/14</td>
<td>6.9</td>
<td>1.9</td>
</tr>
<tr>
<td>2014/15</td>
<td>6.1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Table 4.5. Malawi Ports
### Vessels on Lake Malawi

Malawi Shipping Company, a sister company to Malawi Ports Company all under the management of MOTA-ENGIL, and operates the vessels shown in Table 4.6.

**Table 4.6. Vessels on Lake Malawi**

<table>
<thead>
<tr>
<th>Vessels</th>
<th>Type</th>
<th>Age (Years)</th>
<th>Length (m)</th>
<th>Weight (mt)</th>
<th>Cargo Capacity (mt)</th>
<th>Passenger Capacity</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilembwe</td>
<td>Pass/Cargo</td>
<td>2</td>
<td></td>
<td>20</td>
<td>120</td>
<td></td>
<td>New</td>
</tr>
<tr>
<td>Ilala</td>
<td>Pass/Cargo</td>
<td>67</td>
<td>52.4</td>
<td>620</td>
<td>100</td>
<td>460</td>
<td>Operational</td>
</tr>
<tr>
<td>Mtendere</td>
<td>Pass/Cargo</td>
<td>36</td>
<td>50.7</td>
<td>924</td>
<td>45</td>
<td>420</td>
<td>Needs repair</td>
</tr>
<tr>
<td>Katundu</td>
<td>Container</td>
<td>25</td>
<td>61.5</td>
<td>750</td>
<td>720</td>
<td>0</td>
<td>Operational</td>
</tr>
<tr>
<td>Karonga</td>
<td>Cargo</td>
<td>41</td>
<td>43.1</td>
<td>430</td>
<td>300</td>
<td>0</td>
<td>Operational</td>
</tr>
<tr>
<td>Ufulu</td>
<td>Tanker</td>
<td>33</td>
<td>45.8</td>
<td>424</td>
<td>290</td>
<td>0</td>
<td>Laid up</td>
</tr>
<tr>
<td>Chancy Maples</td>
<td>Pass/Cargo</td>
<td>117</td>
<td>38.4</td>
<td>226</td>
<td>20</td>
<td>180</td>
<td>Not in use</td>
</tr>
<tr>
<td>Viphya</td>
<td>Pontoon</td>
<td>42</td>
<td>16</td>
<td>-</td>
<td>600</td>
<td>0</td>
<td>In service</td>
</tr>
<tr>
<td>Viphya</td>
<td>Tug(Towing)</td>
<td>40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>Operational</td>
</tr>
<tr>
<td>Barge 300</td>
<td>Barge</td>
<td>50</td>
<td>15</td>
<td>5</td>
<td>116</td>
<td>0</td>
<td>Scrapped in 2012</td>
</tr>
<tr>
<td>Nkhwazi</td>
<td>Cargo</td>
<td>60</td>
<td>34.6</td>
<td>295</td>
<td>282</td>
<td>0</td>
<td>Laid up</td>
</tr>
<tr>
<td>Mpasa</td>
<td>Cargo</td>
<td>81</td>
<td>-</td>
<td>250</td>
<td>-</td>
<td>0</td>
<td>Laid-up</td>
</tr>
<tr>
<td>Dowa</td>
<td>Tug(Towing)</td>
<td>69</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>0</td>
<td>Needs Maintenance</td>
</tr>
<tr>
<td>Mulanje</td>
<td>Tug(Towing)</td>
<td>69</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>0</td>
<td>Laid-up</td>
</tr>
<tr>
<td>Thyolo</td>
<td>Tug(Towing)</td>
<td>69</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>0</td>
<td>Under maintenance</td>
</tr>
<tr>
<td>Zomba</td>
<td>Tug(Towing)</td>
<td>69</td>
<td>-</td>
<td>17</td>
<td>-</td>
<td>0</td>
<td>Not in use</td>
</tr>
<tr>
<td>Barge 91</td>
<td>Barge</td>
<td>55</td>
<td>-</td>
<td>-</td>
<td>22</td>
<td>0</td>
<td>Sunk in 2010</td>
</tr>
<tr>
<td>Barge OP1</td>
<td>Barge</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>0</td>
<td>Needs maintenance</td>
</tr>
<tr>
<td>Barge 201</td>
<td>Barge</td>
<td>60</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>0</td>
<td>Not in use</td>
</tr>
</tbody>
</table>

**Vessels**

The challenges faced by the inland water transport on Lake Malawi include:

- Inadequate navigable IWT network (including coverage, width and depth of channels, inability to operate at night)
- Inadequacy of existing infrastructure
- Insufficient maintenance of infrastructure
- Capacity pinch-points, which reduce reliability
- Infrequent IWT services with relatively long journey times
- Variable connectivity/integration with other modes of transport
- Inadequate technical capacity for IWT (across stakeholder groups, ranging from government officials to port authorities)
- Inefficient customs procedures, which can introduce considerable delay for freight
- The distance to sea ports from Malawi (a particular challenge for cost-effective trade facilitation)
- Inconsistent transit policies and IWT planning process in some neighbouring countries
- The diversity of regional stakeholders with the ability to impact domestic activities (e.g. neighbouring countries, Common Market for East and Southern Africa (COMESA) and the Southern African Development Community (SADC)) – recognising also that related co-ordination can, and has been, very fruitful.

The port in Chipoka should be the focal point of Lake activities. It is the only port connected to the railway network with a small container terminal. The port is reportedly 6 meters deep and is capable of docking two 3000 tons’ vessels. However, recent siltation has resulted in a deposited sandbank that has reduced this draft. There is one single pier that is 60 meters long with a gantry crane for containers, in working order, to transfer containers from train to boat (two sidings available). These facilities, although in working order, appear not to have been used for some months. MV Katundu is the only container vessel in Malawi, based in Monkey Bay. Currently the port does not handle any containers.

The Department of Marine Services is responsible for monitoring the two concessions in the sub-sector. The development and fostering the sub-sector is expected to require radical institutional and regulatory reform, particularly with regard to compliance with IMO protocols.
5 Advantages of Inland Water Transport

5.1 Cost

The unit costs of transport by inland water, rail and road are shown in Table 3.1.

<table>
<thead>
<tr>
<th>Location</th>
<th>Inland Transport</th>
<th>Water</th>
<th>Rail</th>
<th>Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yangtze River, China</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Lake Victoria, Uganda</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Lake Malawi, Malawi</td>
<td>1</td>
<td>1-2.5</td>
<td>1.5-4</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.1. Comparative Transport Cost Ratios per tonne-kilometre

In China, costs by inland water transport are half of that of rail transport per tonne-kilometre, and one-sixth of road transport costs. In Uganda, inland water transport is again half the cost of rail transport, and around one-fifth of road transport. In Malawi inland water transport costs are lower than other two competing modes, although by less of a margin.

In Uganda, and its neighbours of Tanzania and Kenya, inland water transport on Lake Victoria is linked to the rail network through the operation of wagon ferries, onto which railway wagons run on rails.

5.2 Capacity

Typical high capacity inland water vessels can transport 2,000 to 3,000 tonnes of cargo. A vessel carrying 2,000 tonnes would be equivalent to a train of 50 wagons of 40 tonnes each, or 80 trucks carrying 25 tonnes each.

In China, a barge carrying 1,750 tonnes of dry cargo on the Yangtze River, would be the equivalent of a train of 16 wagons, or 70 road trucks.
5.3 Fuel Consumption

Fuel consumption by the three modes of transport are shown in Table 3.2.

<table>
<thead>
<tr>
<th>Location</th>
<th>Inland Water Transport</th>
<th>Rail</th>
<th>Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1</td>
<td>1.9</td>
<td>4</td>
</tr>
<tr>
<td>USA</td>
<td>1</td>
<td>1.4</td>
<td>3.7</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>1.8</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3.2. Ratios of fuel consumption per tonne-kilometre carried

On average rail transport consumes 50% more fuel than inland water transport per tonne-kilometre, with transport consuming around 4 to 5 times more fuel than inland water transport. In China, the ratio between road and inland water transport consumption is the highest, owing to the relatively lower fuel efficiency rates of local trucks.

5.4 Safety

There is a very low probability of accidents, and should an accident happen, the costs of that accident are low in economic and human terms. Barges lead the way in safe transport, especially for dangerous cargoes, particularly where high standards of inspection, training and licensing are enforced. The economic costs of accidents in Europe are shown in Table 3.3.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Cost in Euro per tonne-km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Water</td>
<td>0.03</td>
</tr>
<tr>
<td>Rail</td>
<td>0.06</td>
</tr>
<tr>
<td>Road</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Table 3.3. Economic Costs of Transport Accidents in Euro per tonne-kilometre

The costs per tonne-kilometre carried of inland water transport accidents is around half that of rail. Road transport accident costs are 12 to 15 times those of inland water transport.

5.5 Environmental costs

All studies carried out to quantify environmental costs show that inland waterway transport is the most environmentally friendly mode of transport. Noxious emission and greenhouse rates are lowest for inland water transport, as shown in Table 3.4.

<table>
<thead>
<tr>
<th>Emission</th>
<th>Road</th>
<th>Rail</th>
<th>Inland Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>0.03</td>
<td>0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>0.22</td>
<td>0.10</td>
<td>0.07</td>
</tr>
<tr>
<td>Nox</td>
<td>1.15</td>
<td>1.04</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Table 3.4. Emissions Per tonne km
5.6 Reliability
Although inland water transport is the slowest mode of transport, as congestion on the roads rises, and costs and journey times increase, the reliability of road transport is eroded. Inland water journey times are easier to forecast accurately, with consequent reliability in arriving to its end point on time.

5.7 Infrastructure and Maintenance costs
With comparably low investments transport volumes on waterways can be significantly increased. In theory, inland waterways also have comparably low maintenance costs. However, dredging is an issue on many waterways and needs to be factored in as part of operating costs. At the same time climate change is having impacts on water levels in both rivers and lakes.

5.8 Infrastructure Capacity
Inland waterways still offer a large amount of available capacity. For instance, currently only approximately 15% of the Danube’s total capacity is being utilized for inland navigation. On Africa’s lakes capacity is virtually unlimited. As other modes of transport increasingly suffer from congestion, capacity problems and delays which affect mobility and economic competitiveness, inland waterway transport is an obvious choice to play a more prominent role in logistics chains.

5.9 Types of Cargo
Due to their size and loading capacity, inland vessels are especially suitable for transporting goods with unusual sizes and weights. Transformers, turbines, silos, boilers, aircraft sections, locomotives, helicopters etc. can often only reach their destination by ship due to limitations in road and rail transport (e.g. low bridges, narrow roads and intersections and gradients).

Shipping companies can therefore offer the full range of vessels types such as dry cargo vessels, liquid cargo vessels, container vessels and Roll on/Roll off-vessels.

6 International Best Practices

6.1 Principles
A number of European countries – particularly the Netherlands, Belgium and Germany – generate a high level of IWT freight and mode share, based on three strategic factors:

1. Geography – countries located on major rivers (Rhine and Danube);
2. Positive national and regional policies for IWT promotion - especially infrastructure investment and maintenance; and
3. Economic and spatial development factors – in particular proximity of raw material-intensive industries and power stations to the waterways.

There is only limited evidence of direct operating subsidies to IWT – the main example being the Belgian government securing European Union agreement to provide state aid to meet the additional...
costs of IWT container traffic compared with road. Subsidies to provide a competitive advantage to a particular mode of transport are not permitted in the European Union. European experience suggests that there are four key principles for IWT system optimisation, as shown below.

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics efficiency</td>
<td>Smart and intelligent logistics solutions and cost-efficient transhipment support multi-modal, seamless transport and just-in-time delivery of a vast range of cargo over short and long distances</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>A well maintained and climate change resilient IWT network without bottlenecks forms the backbone of a transport infrastructure</td>
</tr>
<tr>
<td>Vessels</td>
<td>A new generation of smart, clean, innovative and climate change adapted vessels enables sustainable transport with low impacts on the environment and forces the use of alternative and sustainable energy sources.</td>
</tr>
<tr>
<td>Education and qualifications</td>
<td>Highly qualified, skilled and motivated crews ensure safe and reliable transport services. Sophisticated approaches such as simulators and e-learning efficiently support education and personal development.</td>
</tr>
</tbody>
</table>

6.2 Examples of European Best Practice

Water Channel Maintenance

The Fairway Maintenance Master Plan for the Danube highlights national needs and shortterm measures to ensure the efficient and effective navigation. The Master Plan includes an overview of existing critical waterway sections or locations, needs and actions. It then estimates the required investment costs and operational costs per country in order to achieve the common Levels of Service, based on monitoring of previous performance.

Vessels

Innovative Inland Navigation (INALAV) is a European Union project which demonstrates the use of small coupled barges equipped with an on-board crane so that transport users do not need to invest in own transhipment equipment. Equipping a small barge with a crane requires a limited investment cargo such as big bags and pallets on small waterways and thereby expanding market coverage. Vessels are being design to eliminate living accommodation which increases load capacity and makes the profession more attractive to young people.

Water Channel Information

The Central Commission for the Navigation of the Rhine provides comprehensive and regularly updated information on the available water depths, cross-section widths and bridge clearances – all available on the web site.

Management Information System

In the Netherlands and Belgium inland container shipping has faced persistent congestion problems and a shortage of handling capacity for containers at the seaports of Rotterdam and Antwerp. These problems are partly caused by insufficient information flows amongst the parties involved. In an attempt to create a more efficient supply chain and to solve this problem, five container operators have developed an information system, MIS-Cobiva. To make it possible to track and trace the ships, they
are equipped with GPS. All data from this GPS are sent by a GPRS-connection to the MIS-Cobiva server. As it nears port a GPS-position is updated every 10 seconds, making it possible for the ship owner and the customer to see the location, direction and speed of the ship.

**Port Planning**

In Serbia the existing port system has been reviewed and a main port plan proposed till the year 2025. The investments related to the construction and procurement of the required infrastructure in the main ports have been defined. Investments are needed in the ports of Apatin, Novi Sad, Smederevo and Senta. Under the “landlord port model”, the government will invest in the basic infrastructure (quay walls, port basin etc.) and the port operator will invest in the operational equipment (loading cranes, warehouses etc.).

In the Netherlands, an inland port toolkit has been developed to promote the wider commercial value of such developments (in the face of competition for water-side housing developments). The toolkit offers a guideline on how to promote the topic “inland ports” to the agenda of the relevant authorities and assists in development for the inland port and/or inland port network. The toolkit provides a clear step-by-step plan with practical and instruments to draft and elaborate on a vision for an inland port. It starts with how to map the current situation and ends with a number of follow-up actions for improvement and implementation. The 2010 UNECE Study on Hinterland connections of seaports (ECE/TRANS/210) investigated seaports and their hinterland connections can help improve supply chain performance, by removing bottlenecks and improving the efficiency and sustainability of port hinterland links in UNECE countries. There are six themes of good practice:

- Initiatives to satisfy trade requirements while minimising transport distance;
- Hinterland transport infrastructure provision and use initiatives;
- Initiatives to make efficient and sustainable use of transport modes;
- Cross-border transport initiatives and the development of partnerships;
- Non-transport initiatives to reduce border crossing delays; and
- Data availability.

**Human capital**

In Belgium qualified inland navigation personnel are becoming scarce. To mitigate this the Flemish regional employment office VDAB organises specific 4-months conversion trainings for 15 job seekers at the same time twice a year, in co-operation with the inland waterway sector. This training comprises theory lectures and traineeships before the final practical examination for which the success rate lies around 95%. The first traineeship at the start of the course consists of two to three introductory days on a vessel, with a one month fully participating traineeship on board of an inland vessel on the Rhine or another river taking place after successful theoretical examinations. This course is paid for by VDAB if the trainee is unemployed. By 2011 226 people have taken the VDAB course, of which 160 have finished the course successfully, and 60% of them have found a job within the sector.
7 Recommendations

7.1 Introduction

Generally, inland waterway transport (IWT) is characterised by a high degree of reliability and safety compared to other transport modes. Against the background of the climate change, however, there are now concerns being raised. IWT is expected to be more sensitive to climate change aspects than other transport modes, e.g. in terms of water level fluctuations and resulting effects on costs and reliability. Shocks to the system caused by rapid flooding can adversely affect port infrastructure as well as river banks. There is a more gradual trend in many areas towards lower water levels that affects navigability and increases the need for dredging.

Rivers, lakes and associated transport infrastructure are being impacted by climate changes, as well as by navigation system operations and vessels. Impacts on rivers, channels and canals may be mitigated through changes in operational control of flow or by modifications to channel maintenance. Because water supply for inland navigation is intimately connected to and competing with other water users such as domestic water supply, industrial and agricultural demand, and ecosystem requirements, operational changes to water control will require legal and environmental analyses and much closer co-ordination between government agencies, and between governments. An example is the tri-lateral arrangement between Mozambique, Malawi and Zambia concerning the proposed inland port on the Shire River. Zambia’s involvement is not related to transport but to the downstream management consequences on the Zambezi River.

Extension of the time range of water level forecasts, increased data sharing regarding unexpected hazardous conditions or conditions requiring restrictions, and lessons learned from response successes and failures, should also improve system operation in the face of climate changes. Impacts to infrastructure will require analysis of existing structures and potentially re-engineering to meet expected loadings under various climate change scenarios.

Impacts of climate change relevant to inland navigation, such as low water levels or floods, are well known phenomena in many parts of Africa. The users of the navigation systems and the operators of the vessels try to respond to these phenomena in a way that assures the reliability of inland navigation. Thus, possible responses of the inland navigation sectors to the impact of climate change are already known and often applied. Changes in transport management and operation of the vessels are short term responses addressing situations, when navigation is inhibited for a short period of time. If navigation conditions are altered over longer periods of time, adaptation of the fleet and new vessels of different design seem to be inevitable.

Waterway users sometimes have to respond to decreased water levels in the absence of increasing authorized dredged channel depths. It may require either light loading of current vessels or use of vessels with decreased draft.
7.2 Managing Climatic Hazards

Generation of greenhouse gases (GHG) in Africa is low. In the transport sector, emissions of CO2 by inland water transport vessels is the lowest. This means more use of waterways for the purpose of transport should result in increased savings in fuel and less emission of CO2.

In most African IWT systems, performance is achieved with old engine technology which means efficiency of fuel consumption can be improved.

Such an improvement would make IWT more competitive and would increase the transfer from road sector to IWT, further reducing the impact on carbon footprint of the sector. The Malawi Shipping Company has recently introduced a new vessel (*MV Chilembe*) on Lake Malawi which has much improved engine technology.

Technological developments need to be improved with the aim of energy efficiency gains for each of the categories below against increased investment costs.

a) vessel operation
b) vessel design
c) engine efficiency and propulsion systems; and
d) alternative fuel options

Navigators on African waterways have already adapted through experience to navigate in the deteriorating conditions of rivers and lakes. Such conditions increase the cost of the maintenance of vessels and of infrastructure and allied services. Due to increased cost for maintenance of the vessels, owners have tended to reduce the focus on safety. As a result, marine accidents have become regular incidents in inland water transport. Most public authorities responsible for development, maintenance and operation of inland water transport cannot meet the increased demand for maintenance of waterways and of ports and landing facilities due to resource constraints.

The maintenance of navigability of the waterways is critical. Dredging techniques and methods need to be determined in a manner that can adapt to the erratic conditions of the rivers due to climate change. Following morphological and social studies dredge spoil should be discharged to raise the river banks, as is being implemented on the River Niger. For sustainable navigability river training work should also be carried out as well.

Practical experience in Asia has revealed that bandalling in some stretches of rivers can assist navigability to some extent. As such bandalling programs should be carried out where feasible.

Facilities in the river ports and landing station need to be made more flexible to adjust the changing conditions of the rivers due to climate change.

Climate change tends to make rivers more meandering and river beds are becoming raised to such an extent that navigation is restricted. Changing conditions of the river will lead to the design and dimension of vessels being changed. Whilst the breadth of a vessel may remain unchanged, the draft
and the length overall (LOA) will need to be altered such that deeper draft long vessels will be replaced by flat bottom with shorter LOA vessels.

Against this background, and in order to address these issues the REC’s and national governments need to take a lead in the areas set out below.

7.3 Policy

REC’s need to articulate a strong policy lead that prioritises inland water transport within regions where this mode offers the demonstrable advantages of lower costs and environmental impacts. Policy should encourage the development and fostering of IWT through interventions that

- Integrate IWT with railways particularly for container transport within the region
- Promote the development of modern IWT port and cargo handling facilities
- Promote the sustainable navigability of rivers and lakes
- Foster the use of modern low energy and low emission vessels

Policy should address the issue of climate change because of the unique impact on IWT. Climate is pan-regional and REC’s are the appropriate lead agencies. (As an example, the Regional Infrastructure Development Master Plan (Transport Sector Plan), prepared by SADC in 2012 does not mention climate change)

Because water management cuts across government agencies, REC’s need to co-ordinate national government policies on IWT and water resources at high level between member states.

7.4 Legal and Regulatory

Most member states have legislation in place to regulate inland water transport. Such laws generally provide for registering, licensing and inspection of vessels, and licensing of ships masters and crews. REC’s should encourage member states to modernise inland water transport legislation with a view to fostering the growth of the sub-sector

There are very few examples of legislation that provide for joint use of waterways with the objective of promoting inland water transport within and through neighbouring countries. Since many navigable African rivers cross national boundaries, and many lakes link countries together there is a case for REC’s to promote appropriate legal documentation that could cover:

- Identification of inland waterway routes for transit and cross border transport;
- Freedom of use of ports, landing stations etc.;
- Freedom of navigation;
- Cabotage;
- Documentation required;
- Pilotage, if required;
Conditions regarding crew members;
• Insurance;
• Duties, taxes etc.;
• Waterway management and maintenance; and
• Institutional arrangements for implementing and monitoring legislation.

REC’s can co-ordinate member states to co-operate in drafting legal agreements and/or draft model legislation.

7.5 Human Capacity

Many states complain of the lack of human capacity in the inland water transport sub-sector. Some states have maritime training schools, although not all these are functioning well. REC’s should co-ordinate the planning and implementation of training across regions with a view to using existing schools efficiently and promoting a more international approach.

7.6 Infrastructure

REC’s should take a lead in identifying potential demand for inland water transport, particularly international trade. They should then move to promoting appropriate investment that is co-ordinated in terms of geographical need, port locations, and co-ordinated handling facilities for identified cargoes.

7.7 Institutional

A strong institutional lead is vital for any transport sub-sector. In many African countries, inland water transport is managed by a department within a Ministry of Transport or equivalent. This usually results in lack of funding and human resource constraints and a lack of growth in the sub-sector. Countries that have wished to develop IWT tended to have established inland water transport authorities.

REC’s should promote the establishment of modern agencies to manage, regulate and promote inland water transport. REC’s can prepare model legal arrangements along with duties and responsibilities.

REC’s could move to encouraging regional and/or cross border agencies, along the lines of corridor management authorities established in road sub-sector. These can address common navigation issues, along with all the logistic arrangements for efficient cross-border trade.

Nigeria’s system of federal government can pose obstacles to integrated management of waterways that cross state borders. The former Inland Waterways Department of the federal government suffered from political interference and a lack of funding from government allocations. In response the Government of Nigeria established the National Inland Waterways Authority (NIWA), which has greater autonomy than the department, and has a legal mandate to develop inland water transport. Its
commitment to promoting this mode of transport is shown in the capital dredging programme which cost around $216 million, and was immediately followed by maintenance dredging.

In 2014, an estimated 2.1 million tonnes of cargo were carried; around 610 million tonne kilometres. Using transport costs from the Congo river, this provided savings of US 10 cents per tonne-km compared to using road transport. The economic saving to the country for that year was around $61 million, or a first year economic rate of return of 28.2%.

7.8 Other Pan-National Institutions

In 1999 the governments of Cameroon, Central African Republic, Democratic Republic of Congo, and the Republic of Congo established the International Commission for the Congo-Oubangui-Sangha Basin. The immediate objective of CICOS is to improve cooperation among its member states through improved communication via the Congo River and its tributaries; a longer-term objective is to promote integrated water resources management (IWRM) in order to enhance development and alleviate poverty in the member states. This institution allows for a co-ordinated approach to dredging and the promotion of inland water transport on the River Congo.

7.8.1 Co-ordinated Concession Management

Many railways in Africa are operated under concession agreements. Most inland water transport operations in Africa are either the subject of concessions or entirely private sector operated. The movement away from Government involvement in operating the sub-sectors, designed to promote investment and improve efficiency has had the unintended consequence of reducing co-ordination between two modes of transport that work best when physically co-ordinated.

Rivers and lakes by definition have limited reach. Africa’s railway network was developed as part of an uncoordinated colonial scramble. However, there are cases where ports were developed at railway nodes, and where the two modes are linked. Good examples are Chipoka on Lake Malawi, and Port Bell and Mwanza on Lake Victoria, Kisangani and Kinshasa on the River Congo.

However, in Malawi lake services and railways operations have been concessioned to two separate private companies. This places a burden on customers who are not immediately able to see a seamless transport solution. Even where two concessionaires are able to co-operate, their focus tends to be a financial objective, rather than an overall economic benefit to the country. Furthermore there is a danger of concessions in rail and inland water competing for the same kind of traffic. Whilst this might result in lower costs, it can also draw attention away from potential co-ordinated approaches. It can also affect easy trans-shipment.

Separate concessions also means that companies focus on businesses that are individually core, without looking for communalities of interest. This becomes obvious in the case of container traffic, where one party may have the required rolling stock or vessels, but the other requires to invest. Unfortunately, very few of Africa’s concessions in these sub-sectors have resulted in significant investment.
In Tanzania, the services on Lake Victoria were separated from railway operations. Whilst this did not occur formally in Uganda, the government has tended to have to take the lead in inland water transport, with the railway concessionaire (Rift Valley Railways) focussing on rail-only operations. For example, the Government of Uganda, funded the repair of MV Kaawa, a rail-wagon ferry.

A response to this is some form of co-ordinated concession management. Rail and inland water transport regulation should be performed under a single entity, preferably autonomous, but one given a legal mandate to co-ordinate and promote the two sub-sectors and to manage the two (or more) concessions with that same objective in view. Proposals for such a body have been developed in Malawi.

Zambia has taken a different approach. Following a non-performing railway concession the government terminated the agreement in 2012, and operates the railway itself through Zambia Railways Limited. This allows the government to take a more coordinated approach to rail and inland water transport. Its transport policy provides for the promotion of the two sub-sectors and this is evidenced in proposals to develop the Mbulungu port on Lake Tanganyika, and to connect this port by railway to Seluku on the TAZARA line.
8 Appendix 1: River Nile

Egypt

The trunk stream of the River Nile is formed at Khartoum, Sudan, 2,988 km from the sea, by the junction of the Blue Nile (1,610 km long) and the White Nile (3,700 km long). The Blue Nile rises in the headwaters of Lake Tana, NW Ethiopia, a region of heavy summer rains, and is the source of floodwaters that reach Egypt in September; the Blue Nile contributes more than half of all Nile waters throughout the year. During floodtime it also carries great quantities of silt from the highlands of Ethiopia; these now collect in Lake Nasser behind the Aswan High Dam, but for centuries they were left on the floodplain after the floods and helped replenish the fertility of Egypt's soils. The Merowe Dam, under construction below the fourth cataract in Sudan, will also capture the silt, though the dam there is designed to facilitate the flushing of sediment. The White Nile (known in various sections as the Bahr el Abiad, Bahr el Jebel, Albert Nile, and Victoria Nile) rises in the headwaters of Lake Victoria in a region of heavy, year-round rainfall; unlike the Blue Nile, it has a constant flow, owing in part to its source area and in part to the regulating effects of its passage through lakes Victoria and Albert and the Sudd swamps. Other important tributaries of the Nile are the Atbara and Sobat rivers. The Gezira, or "island," formed between the Blue Nile and the White Nile as they come together at Khartoum is Sudan's principal agricultural area and the only large tract of land outside Egypt irrigated with Nile waters.

From Khartoum to the Egyptian border at Wadi Halfa (now submerged) and on to Aswan in Egypt, the Nile occupies a narrow entrenched valley with little floodplain for cultivation; in this stretch it is interrupted by six cataracts (rapids). From Aswan the river flows north 885 km to Cairo, bordered by a floodplain that gradually widens to 20 km; irrigated by the river, this intensively cultivated valley contrasts with the barren desert on either side. North of Cairo is the Nile delta (160 km long and up to 185 km wide), which contains 60% of Egypt's cultivated land and extensive areas of swamps and shallow lakes. Two distributaries, the Dumyat (Damietta) on the east and the Rashid (Rosetta) on the west, each around 240 km long, carry the river's remaining water (after irrigation) to the Mediterranean Sea.

Regular steamship services are maintained on the Nile between Alexandria (reached by canal) and Aswan; the Blue Nile is navigable June through December from Suki (above Sennar Dam) to Roseires Dam; the White Nile is navigable all year between Khartoum, Sudan, and Juba, South Sudan, and between Nimule, South Sudan, on the White Nile, and Kabalega (formerly Murchison) Falls, Uganda, on the Victoria Nile.

Within Egypt the Nile transports 6 million tonnes of cargo annually. However, its contribution to overall freight transport in Egypt does not exceed 0.5%. There are currently 67 bridges, 13 locks and 48 ports on the Nile that require rehabilitation to facilitate navigation in the river.

In order to develop the inland waterway transport sector in Egypt, the following were completed in 2014:
1) The opening of the navigable lock, small and large, at the Alexandria port at a cost of LE 50 million to maximize the role of IWT in the transport of goods, increase the transport rate from 100 to 1000 tons / day and to reduce the crossing times of the river units from 45 to 15 minutes.

2) The implementation of periodic maintenance and cleaning projects of waterways to facilitate the movement of transportation throughout the year and to ensure the continuity of the Nile cruises between Cairo and Aswan.

3) The implementation of the periodic maintenance of navigation locks, the most recent is the one located on the Al Nubaria channel 28.5 km long, at a cost of LE 3.35 million.

4) The development and improvement of the performance of the waterway Aswan / Wadi Halfa at a cost of LE 4 million.

The National River Port Management Company (NRPMC), is Egypt’s leading operator of river ports. It transports up to 2 million tons of wheat annually along the River Nile for Egypt’s General Company for Silos and Storage (GCSS), a key state-owned importer and distributor of wheat.

NRPMC’s first operating river port at Tanash, (20 kilometers north of Cairo). The 27,500-square-meter port, which has been operational since late 2009, is capable of handling 2 million tons of grain and other bulk material and 110,000 TEUs (twenty-foot equivalent units) per annum. Its strategic location 1.5 kilometers away from the Cairo Ring Road gives it direct access to Sixth of October and Tenth of Ramadan cities, Cairo’s main industrial centers.

NRPMC won a public tender to rent the Tanash Port from Nasr Co. for Casting in March 2008 for a period of 15 years. Since then, the company has invested over US$ 3 million to upgrade facilities and purchase new handling equipment.

The wheat contract uses 30 barges operated by NRMPC sister company Nile Cargo, and these moved 750,000 tons of wheat in 2010. Transporting wheat via river barges saves the state up to 20% of what it would have paid to transport by truck.

National Ports has recently committed US$ 27 million to the roll-out of a river-transport network that will create 500 new direct jobs and 1,500 indirect jobs in 2010 alone, through the development of four additional river ports: Tebbin (15 kilometers south of Cairo), Alexandria (2 kilometers south of the Port of Alexandria on the Nubaria Canal), Beni Suef and Minya. Plans are also underway to roll out ports in Assuit and Aswan to complete a network of ports to connect the north and south of Egypt.

These investments are intended to ease pressure on Egypt’s highway network, with a single 100-meter river barge moving as much wheat as 40-50 trucks. In 2008 Nilre Logistics was awarded a contract to transport 750,000 tons of coal and coke between Alexandria and Tebbin for Al-Nasr Company for Coke & Chemicals, one of the largest producers of metallurgical coke in the Middle East.

The volume of river traffic in 2010 more than tripled compared to the year before from 2.3 million tonnes to 7.7 million tonnes, saving the government about LE262 million in fuel subsidies. River shipping also provided savings by reducing the cost of road maintenance, the number of road
accidents, traffic, and vehicle maintenance. It also improved environmental conditions. The main shipments were wheat, cement, marble, coal, calcium sulfate, stones, fertilizers, silt, and phosphates.

In the past 30 years, river transport as a share of total cargo volume has decreased from 5 to 0.5 percent, while trucks continue to dominate transport. Despite calls for investment over the past years to upgrade deteriorated infrastructure, cargo transport on the Nile River remains under-utilized. However, the Nile is a central element of Egyptian life and culture: 95% of population live along its banks.

In order to address this imbalance the River Transport Authority of Egypt (RTA) sought assistance on framework and risk-sharing issues for a potential public-private partnership (PPP) covering four river ports in Qena, Sohag, Meet Ghamr, Assiut (Upper Egypt). The objectives were to:

1) Identify the short and longer term actions required to strengthen the environment of a river ports PPP project;
2) Identify investment climate shortcomings, and prioritise the implementation of appropriate policy remedies;
3) Assist the RTA in advancing the project onto the Government of Egypt PPP pipeline;
4) Drafting of the Assessment Report on the Nile River Ports project, including a proper delineation of risk sharing between public and private sector actors and a proposal for template tender documents and indicative terms of reference for a feasibility study;
5) Advice on other aspects of the PPP and/or sectoral framework that are critical for private investors and may constitute obstacles to private sector participation in river transport infrastructure projects; and
6) Analyses of a previous attempt by the RTA to tender a river ports project by PPP in 2009-10.

The recent Misr National Transport Study” (MiNTS) by JICA predicted that if no policy changes were enacted, river transport volume by 2027 will constitute a mere 1 percent of the predicted 900 million tons of cargo clogging Egypt’s roads. The challenges identified were:

a) Lack of a proper market feasibility/demand study
b) Improper allocation of risks in previous tender documents:
c) Licensing and Permit Risk
d) Funding of Off-site Infrastructure
e) Traffic Risk Pushed to Private Sector
f) Policy / Regulatory issues
g) Fluctuating water levels
h) Electronic buoys aids in navigation have been stolen or poorly maintained.
i) Shift to electronic navigation systems, necessary to ensure night-time navigation
j) Time losses due to limited hours with locks being closed at night

k) Need for dredging programme

The Government of Egypt is tendering in 2016/17:

(i) River Transport Projects: aims to construct three-river transport ports to develop river transport to be one of the main and important transportation facilities in Egypt.

(ii) Nile River Bus Ferry: The project aims to develop, manage, and operate the river bus facility in Greater Cairo. It includes the modernisation of river transport fleet and adding new units to it, in 30 new river ports, half of which are new.

Sudan and South Sudan

The White Nile from Kosti through Renk, Malakal, Shambe, Bor, and continuing south through Juba is the most important river corridor in Sudan because it provides the only reliable transport connection between the central and southern parts of the country during the rainy season, when roads and airstrips are often compromised. In addition to the main trunk route provided by the White Nile, tributaries support key neighbouring regions. These tributaries can potentially provide a vital seasonal link when water levels allow.

The following river corridors are regarded as accessible during the rainy season by currently operating river companies:

(i) The Sobat corridor – stretches between Malakal and Nassir;

(ii) The Zeraf River – this route is seasonal and is subject to blockage by water hyacinth and silt

(iii) The River Bahr el Ghazal route – reaches from Malakal to Bentiu

(iv) The River Jur – can extend up to Wau and provides an alternative to accessing Wau by rail (the line extends from Babanusa)

Due to the seasonal fluctuations of the White Nile (and its tributaries) and the constant water hyacinth menace, passage via these tributaries cannot be guaranteed until systems are in place to constantly monitor conditions. Proper maintenance of the river bed reduces operators’ reliance on navigational aids, however the White Nile river corridor has not been properly dredged since the early 1980’s. Operators report that some parts of the corridor need urgent dredging and clearing, particularly the section next to the Juba Port, which contains hazards such as silt build-ups and wrecks. An international company has signed an agreement with the Government of South Sudan to dredge and develop sections of the river. Additionally, some private entities are planning to improve areas next to their proposed new private facilities.

Though barges and other river transportation vessels call at various locations along the White Nile, the main ports are Kosti, Malakal, Bor and Juba. With the privatization of the River Transport Company (RTC) and the entry of new players into the market the construction of new private ports and facilities is expected to spur the upgrade of existing ports, especially in the South. At the port of Kosti, SRTC/NRTC took over the existing facilities from RTC and has begun major refurbishment
along with rehabilitation of barges. Companies are building private ports with their own jetties just as quickly as they are constructing their barges. In South Sudan, existing ports belong to the Government, so private companies have begun investing in land to construct their own facilities.

The old Juba Port was the River Transport Company’s (RTC) port of call. It was abandoned due to silting, however, and construction of the new Juba Port was initiated. The new state-owned Juba Port, also known as the Juba Embankment Port, has no infrastructure and is a rapidly receding embankment due to erosion. Despite state ownership, service prices are significantly influenced by private operators. There are no facilities and mooring rings – nearby mango trees are used for mooring. Offloading is nearly always manual unless a container or other heavy cargo must be moved and, in these cases, mobile cranes are required. There is no mechanical equipment at the port, so private operators are the only option. Manual loading and offloading is done under the auspices of a union, which dictates very high rates and will not permit non-union labour being brought in.

The new port has seen an increase in cargo movement, mainly due to increased trade between North and South, but the present volume is not comparable to that transported in the 1980’s.

The main physical constraints to the journey time and operation from Kosti to Juba along the White Nile are shifting sands, low water levels and water hyacinth.

Water hyacinth seriously restricts movement on waterways due its thick growth and matting. Tributaries are more affected by this phenomenon than the free, fast-flowing main river. Dealing with water hyacinth requires either intensive human labour to constantly cut the weed or treatment using biological agents, such as beetles.

During the dry season the water level in the Nile drops allowing only barges with draughts of 1.2 metres or less to pass, compared to the wet season when draughts can range between 1.6 metres and 1.85 metres. During this period of shallow water, barges carry around 60-75 per cent of their normal cargo volume. Exposed rocks present an additional hazard when water levels are low, carrying the risk of damaging and possibly sinking the barges. Dredging projects have been earmarked along several points and ports to mitigate this problem.

A further constraint to using river services along the White Nile (and especially in Juba and Kosti) is the long-established, albeit informal, porters’ union. These stevedores/porters, are not controlled by the state or private companies. Rates for manual labour are exceptionally high, as much as US$12-17 per metric ton in some cases. Porters argue that the main reasons for the high rates are that the loading/offloading facilities in the port are very old and unreliable.
9 Appendix 2: Glossary of Terms

**Backhaul**: The process of a transportation vehicle returning from the original destination point to the point of origin. The 1980 Motor Carrier Act deregulated interstate commercial trucking, thereby allowing carriers to contract for the return trip. The backhaul can be with a full, partial, or empty load.

**Barge**: The cargo-carrying vehicle which may or may not have its own propulsion mechanism for the purpose of transporting goods. Primarily used by Inland water carriers, basic barges have open tops, but there are covered barges for both dry and liquid cargoes.

**Best Practice**: A specific process or group of processes which have been recognized as the best method for conducting an action. Best practices may vary by industry or geography depending on the environment being used. Best-practices methodology may be applied with respect to resources, activities, cost object, or processes.

**Bill of Lading (BOL)**: A transportation document that is the contract of carriage containing the terms and conditions between the shipper and carrier.

**Bonded Warehouse**: Warehouse approved by a government’s revenue agency and under bond/guarantee for observance of revenue laws. Used for storing goods until duty is paid or goods are released in some other proper manner.

**Break-Bulk**: The separation of a consolidated bulk load into smaller individual shipments for delivery to the ultimate consignee. The freight may be moved intact inside the trailer, or it may be interchanged and rehandled to connecting carriers.

**Break Bulk Cargo**: Cargo that is shipped as a unit or package (for example: palletized cargo, boxed cargo, large machinery, trucks) but is not containerized.

**Break Bulk Vessel**: A vessel designed to handle break bulk cargo.

**Cabotage**: laws that requires goods to be carried in a certain country to be carried by trucks or vessels registered in that country.

**Carrier**: A firm that transports goods or people via land, sea, or air.

**Consignee**: The party to whom goods are shipped and delivered. The receiver of a freight shipment.

**Consignment**: (1) A shipment that is handled by a common carrier. (2) The process of a supplier placing goods at a customer location without receiving payment until after the goods are used or sold.

**Consignor**: The party who originates a shipment of goods (shipper). The sender of a freight shipment, usually the seller.

**Consolidation**: Combining two or more shipments in order to realize lower transportation rates. Inbound consolidation from vendors is called make-bulk consolidation; outbound consolidation to customers is called break-bulk consolidation.
Consolidation Point: The location where consolidation takes place.

Container: A box, typically 20 to 40 feet long, which is primarily used for ocean freight shipments. For travel to and from ports, containers are loaded onto truck chassis or on railway flat wagons.

Container Depot: The storage area for empty containers.

Container Freight Station (CFS): The location designated by carriers for receipt of cargo to be packed into containers/equipment by the carrier. At destination, CFS is the location designated by the carrier for unpacking of cargo from equipment/containers.

Containerisation: A shipment method in which commodities are placed in containers, and after initial loading, the commodities, per se, are not rehandled in shipment until they are unloaded at the destination.

Container Terminal: An area designated to be used for the stowage of cargo in containers that may be accessed by truck, rail, or ocean transportation.

Container Vessel: A vessel specifically designed for the carriage of containers.

Container Yard: The location designated by the carrier for receiving, assembling, holding, storing, and delivering containers, and where containers may be picked up by shippers or redelivered by consignees.

Cost, Insurance, Freight (CIF): A freight term indicating that the seller is responsible for cost, the marine insurance, and the freight charges on an ocean shipment of goods.

Customs: The authorities designated to collect duties levied by a country on imports and exports.

Customs Clearance: The act of obtaining permission to import merchandise from another country into the importing nation.

Deadweight Tons (DWT): The cargo carrying capacity of a vessel, including fuel oil, stores and provisions.

Electronic Commerce (EC): Conducting business electronically via traditional EDI technologies, or online via the Internet.

Electronic Data Interchange (EDI): Intercompany, computer-to-computer transmission of business information in a standard format.

FOB: A term of sale defining who is to incur transportation charges for the shipment, who is to control the shipment movement, or where title to the goods passes to the buyer; originally meant "free on board ship."

Free on Board (FOB): Contractual terms between a buyer and a seller that define where title transfer takes place.

Freight: Goods being transported from one place to another.

Freight Forwarder: An organization which provides logistics services as an intermediary between the shipper and the carrier, typically on international shipments. Freight forwarders provide the
ability to respond quickly and efficiently to changing customer and consumer demands and international shipping (import/export) requirements.

**Goods:** A term associated with more than one definition: 1) Common term indicating movable property, merchandise, or wares. 2) All materials which are used to satisfy demands. 3) Whole or part of the cargo received from the shipper, including any equipment supplied by the shipper.

**Haulage:** The inland transport service which is offered by the carrier under the terms and conditions of the tariff and of the relative transport document.

**Import:** Movement of products from one country into another. The import of automobiles from Germany into the US is an example.

**Import/Export License:** Official authorization issued by a government allowing the shipping or delivery of a product across national boundaries.

**Inland Carrier:** An enterprise that offers overland service to or from a point of export.

**Interline:** Two or more motor carriers working together to haul a shipment to a destination. Carriers may interchange equipment but usually they rehandle the shipment without transferring the equipment.

**Intermodal Container Transfer Facility:** A facility where cargo is transferred from one mode of transportation to another, usually from ship or truck to rail.

**Intermodal Transportation:** Transporting freight by using two or more transportation modes, such as by truck and rail or truck and oceangoing vessel.

**International Maritime Organization (IMO):** A United Nations-affiliated organization representing all maritime countries in matters affecting maritime transportation, including the movement of dangerous goods. The organization also is involved in deliberations on marine environmental pollution.

**Lighter:** A barge-type vessel used to carry cargo between shore and cargo ship. While the terms barge and lighter are used interchangeably, a barge usually refers to a vessel used for a long haul, while a lighter is used for a short haul.

**Logistics:** The process of planning, implementing, and controlling procedures for the efficient and effective storage of goods, services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements. This definition includes inbound, outbound, internal, and external movements.

**Modal Split:** The relative use that companies make of transportation modes; the statistics include ton-kilometres, passenger-kilometres, and revenue.

**Passenger-Kilometre:** A measure of output for passenger transportation that reflects the number of passengers transported and the distance traveled; a multiplication of passengers hauled and distance travelled.
**Port Authority:** A state or local government that owns, operates, or otherwise provides wharf, dock, and other terminal investments at ports.

**Portage railway:** A short and possibly isolated section of railway used to bypass a section of unnavigable river.

**Shipping:** The function that performs the tasks for the outgoing shipment of parts, components, and products. It includes packaging, marking, weighing, and loading for shipment.

**Supply Chain:** (1) Starting with unprocessed raw materials and ending with the final customer using the finished goods, the supply chain links many companies together. (2) The material and informational interchanges in the logistical process, stretching from acquisition of raw materials to delivery of finished products to the end user. All vendors, service providers, and customers are links in the supply chain.
MODULE 16 ROAD TRANSPORT SERVICES IN WEST & CENTRAL AFRICA AND IN EAST & SOUTHERN AFRICA

Module 16.1 Road Transport Services in West and Central Africa

By Jean Acri

Table of Contents
1 Assessment of the situation of the Road Transport Sector ................................................................. 3
  1.1 Introduction ........................................................................................................................................ 3
  1.2 Historical background of the road transport sector’s organization in Western and Central Africa ......................................................................................................................... 3
  1.3 Liberalization and its effect over the past decade in Western and Central Africa ..... 4
    1.3.1 The road transport liberalization in Western and Central Africa ................................. 4
    1.3.2 Effects of the abrupt liberalization on the road transport sector ............................ 5
    1.3.3 Situation of the road transport sector in Western and Central Africa ............. 6
    1.3.4 Institutional aspects ................................................................................................................. 11
  1.4 Conclusion/Recommendations ........................................................................................................... 12
2 Regional harmonisation of the Regional Freight Industry (Access to profession, standards, regulations control & enforcement) .................................................................................. 13
  2.1 Acknowledging the key role of the road transport industry to achieve economic and trade development as well as Regional integration ................................................................. 13
    2.1.1 Increasing the visibility of road transport in development policies ....................... 14
    2.1.2 Organize the professional representation of the road transport industry at National level within a Regional perspective ................................................................. 15
    2.1.3 Adopt and implement permanent concertation structures with the Road Transport Sector ...................................................................................................................... 18
  2.2 Structuring and organizing the road transport sector at national and regional levels ................................................................................................................................. 20
    2.2.1 Define rules for accessing the road transport profession ........................................ 20
    2.2.2 Propose a Certificate of Competence for professional drivers .............................. 28
    2.2.3 Define rules for accessing connected transport and logistics professions and transport intermediaries ................................................................................................................. 29
  2.3 Activate and modernize existing regional instruments ................................................................................. 30
    2.3.1 Actions at regional level (modernization of legal instruments).............................. 30
    2.3.2 Actions at bilateral level ........................................................................................................... 32
    2.3.3 Actions at national level ........................................................................................................... 33
2.3.4 Facilitate implementation through harmonized enforcement approach: definition of regional best practices for controls and enforcement ..........34

3 Measures for liberalizing and financing the Road Transport Industry .................35

3.1 Organize the freight road transport market to optimize its efficiency and competitiveness ..........................................................................................................................36

3.1.1 Adopt common definitions for transport for hire and reward and own account transport ..................................................................................................................................................36

3.1.2 Review the conditions of access to freight ..........................................................................................................................................................................................37

3.1.3 Secure transport operators positions to allow the sector to become profitable and competitive ..................................................................................................................38

3.1.4 Create optimal operating conditions for better profitability of the road transport sector .............................................................................................................................................40

3.1.5 Review the domination of the maritime sector in the organisation of the road transport sector ...........................................................................................................................................44

3.1.6 Review the shippers practices .................................................................................................................................45

3.1.7 Review transport tariffs based on operations (time and distance) and not Tons/Km .................................................................................................................................47

3.2 Step by step liberalization and modernization of the bilateral road transport agreements ............................................................................................................................................48

3.3 Develop a comprehensive approach for financing and renewing the fleet of commercial vehicles ...........................................................................................................................................51
1 Assessment of the situation of the Road Transport Sector

1.1 Introduction

In West and Central Africa, the road transport sector, whether national or regional, is generally considered as unreliable, of low quality services, very expensive, dangerous and environmentally unfriendly due to the old aged vehicle fleet in use. It is in this context that an analysis of the root causes of the situation must be carried out in order to remedy it. In this regard and in order to identify the main issues to be resolved as a basis for drafting of the Comprehensive Sector Guidelines, this report will focus on the following:

- The historical background of the organization of the road transport sector in Western and Central Africa
- The liberalization of the road transport sector in the two regions, its effects over the past decade and the current situation, and
- The development of the own account transport and its consequences

1.2 Historical background of the road transport sector’s organization in Western and Central Africa

Historically, the organization of the road transport sector in Western and Central Africa was very much based on the European model that prevailed before the 1970s which was characterized by sectoral policies that were coordinated and implemented at national level, and a sector regulated on the basis of quantitative restrictions, rigid freight distribution mechanisms and compulsory tariffs for the domestic and international transport markets.

The access to the transport sector profession was based on administrative controls that required the registration of transport companies and allocation of licenses or authorizations to operate which were quantitatively limited either by tonnage or by geographical restrictions or sometimes a combination of both.

The freight market (national and inter States) was strictly regulated and administered. Shippers had the obligation to declare any available freight to the Freight Offices (Bureau de fret). These Freight Offices were tasked with the responsibility to register the available freight and to allocate it to available trucks that were registered. This freight distribution mechanism was based on a simple principle of “first truck registered, first truck loaded”, which was the practice of the so called “tour de role”.

Freight tariffs were also regulated by ministerial decree. Tariffs were prescribed based on tonnage and distance and a profit margin for the transport companies.

At inter State level, quotas of tonnage were imposed through bilateral transport agreements whereby road transport operators from hinterland landlocked countries would have a reserved bilateral quota for freight transiting through sea ports of up to two-thirds while road transport operators from the coastal states would benefit from the remaining one-third. As for bilateral trade, the transport quotas would be based on a 50/50 arrangement. Shippers Councils from the hinterland landlocked States
were in charge, through their offices located at the various ports, to organize the freight distribution according to the established quotas.

This system prevailed up to the early 1990s especially for the domestic transport sector.

1.3 Liberalization and its effect over the past decade in Western and Central Africa

1.3.1 The road transport liberalization in Western and Central Africa

International Financial Institutions considered that this type of regulated market organization was not to be continued in the context of emerging globalization of trade and advocated or imposed the liberalization of the road transport market.

However, it should be noted that the abrupt liberalization of the national transport markets, imposed over the last 15 years, was driven more by the need to achieve economic and structural reforms than the need to develop a sustainable road transport sector. This resulted in the liberalization of domestic road transport market being undertaken without any transition or accompanying measures to cushion the sector from the impact of the reforms and liberalization. There was no gradual restructuring of the sector and reorganization of all the logistics professions and functions as was the case in Europe. This is what contributed to the weakening of the road transport sector in the regions concerned.

As a result, the road transport market disintegrated in all the countries in the two regions. Transport prices went down and profitability plummeted.

BOX: 1

Liberalization of the road transport market in Europe: a step by step approach

Further to the Rome Treaty a common transport policy had to be developed amongst Member States of the EEC. However, for road transport, efforts started at European level in the mid 1970’s.

Basically, road transport was managed and administered at national level without coordination. France, Germany, and other countries had developed road transport regulations based on a much regulated approach through quantitative restrictions and compulsory tariffs. This regulated approach persisted up to the late 1980’s at national level, while in parallel the European market started to move towards a qualitative approach rather than a quantitative restrictive regulation.

Mid 1970’s, access to the road transport sector profession rules were adopted at European level and criteria of professional competence was introduced. Member States, based on European Legislation, started to adjust their national legislation accordingly. Certificates of professional competence were introduced on a step by step basis and Training Institutes started to develop. The European rules were supplemented with integrity and later, financial capacity conditions, which in turn were introduced in national legislation step by step.

At national levels quantitative restrictions were slowly moderated by a qualitative criteria of access based on professional competence and were completely replaced in the mid-1980s. It is interesting to note that European countries prescribed long transitional periods to allow existing operators to adjust to the new criteria (for instance, 5 to 10 years as was in France).

The liberalization was finalized only at the very end of the 1990s with the complete disappearance of compulsory road transport tariffs (In France it happened on 1st January 1989).

Since then the EU rules have continued to be modernized with the last update having been introduced in 2009.
1.3.2 Effects of the abrupt liberalization on the road transport sector

1. Emergence of informal transport intermediaries and disorganization of the road transport freight market

The rather abrupt liberalization of national road transport markets in Western and Central Africa has created the emergence of informal operators that are currently predominant in the freight distribution market that was suddenly left without any regulatory legal framework.

Informal intermediaries known as “Coxers” have proliferated and created a cartelized the freight distribution market benefiting from the vacuum that was left by the disappearance of the Freight Offices (Bureau de Fret). However, due to lack of a regulatory legal framework and status for this profession, they act with no liability towards the goods, the client or the transport company. In reality they benefit from commissions they get paid without adding any real value to the market.

2. Increasing predominance of the Maritime sector over the land transport

At inter States transport level, the disorganization of the national markets has paved the way for the foreign maritime industry operators to involve themselves deeply and finally dominate the organization of post or pre maritime transport to or from hinterland countries further aggravating accessibility for inter States road transport operators to regional markets. The international road transport sector is also facing the same pitfalls as national transport markets.

Foreign maritime companies have also abused the lack of regulation of the transport intermediary professions and developed door-to-door services using subcontractors for the road transport leg before or after a maritime transport leg through sister or surrogate companies. They have therefore built an increasing dominant position and cartels over the road transport market by acting as intermediaries outside of any regulation and by monopolizing directly or indirectly the inter States road transport market.

Maritime shipping companies and their logistic dependent sister companies have managed to develop captive services as a result of the disintegration of the road transport industry in Western and Central Africa. They have implemented widely the concept of Direct Bill of Lading for ensuring Door-to-Door services up to the destination countries in the hinterland, through which they become in charge of organizing and contracting post or pre maritime transport. In reality, they operate as forwarders, while this profession ignores in Africa any rules for access to the road transport sector profession. By acting as intermediaries directly or through their sister forwarding companies, they sub contract the road transport leg at low tariffs to maximize their benefits and often position their own fleet acting abusively as own account transport actors when in fact they are playing the role of professional transport operators (for hire and reward). By so doing, they escape from public transport regulation and directly benefit from an unfair competition environment to the detriment of professional road transport operators.

3. Lack of preparedness and professionalism

The liberalization of national road transport markets, without transitional arrangements nor accompanying mitigatory measures, led operators to move from a very structured and organized market where prices were defined, freight distributed in a very strict manner to a fully liberalized market with freedom of tariffs and absence of regulation for the freight market.
The lack of requisite skills by professional road transport operators, particularly in accounting and financing, has expedited and contributed to the disintegration of the sector. Most operators are still today not able to even evaluate their basic running costs and are under the dictates of informal intermediaries that are prescribing the transport prices. The low sectoral capacity to deliver acceptable services and the sectoral instability is directly related to the lack of qualitative criteria for accessing the road transport sector profession.

The low quality of service is directly resulting from the lack of professionalism, and this applies at company management or ownership levels as well as at drivers’ level.

Most countries generally have a very weak and poor driver training regime. This is further aggravated by the lack of dedicated training capacity for professional drivers that in fact are learning their profession on the job. A simple driving license suffices for one to pose and operate as a professional driver when it is well acknowledged that a professional driver’s task goes far beyond just the driving skills.

As far as inter States transport is concerned, both ECOWAS and CEMAC instruments do not provide any rules for access to the road transport sector profession and are only addressing the access to inter States transport market. Inter States transport operators must first be registered at national level as road transport operators according to national rules and must subsequently obtain the required authorization to operate at inter State level. The same goes for professional drivers involved in inter State transport in that they must be holders of the driving licenses required for the category of vehicles they drive which licenses are issued at national levels.

The above reinforces the observation that the success of the inter States road transport sector is largely dependent on the way the profession is organized and regulated at the national levels.

1.3.3 Situation of the road transport sector in Western and Central Africa

1. Fragmentation of the profession

In Western and Central Africa, the road transport sector is massively composed of small enterprise and individual operators that are so deeply fragmented as to comprise any real or meaningfully recognizable and significant economic sector.

This fragmentation has many negative consequences in terms of the economic performance of the sector in that individual operators have no commercial capacity or leverage to approach shippers directly and are therefore dependent on intermediaries who are only preoccupied in securing their commission and in offering the lowest possible prices to carriers.

In addition, the fragmentation impedes the sector from being organized through nationally structured professional representation bodies as the operators resort to representation through hundreds of small syndicates that are geographically spread out and dispersed. The immediate consequence of this situation is the absence of credible representatives for the sector to interface with Governments and present a common vision and voice to their issues, problems and suggested solutions.
2. Bad operating conditions

It is felt that the road transport sector is not providing services of sufficient quality as expected by shippers who are interested in reliability, predictability, punctuality and efficiency of services.

However, when examining the operating conditions, it appears that at least as far as predictability, reliability and punctuality are concerned, road carriers are in fact negatively affected by poor operating conditions and external factors over which they have no control. In this regard, one needs look no further than the average operating conditions for inter State transport operators carrying cargo on the Abidjan – Ouagadougou corridor.

Most of the difficulties and delays experienced by inter States transport operators are in most cases caused by inappropriate and duplicated transportation procedures that can be summarized as follows:

- Goods are offloaded from a ship at the entry maritime Port (Abidjan or San Pedro)
- A trucking company and a given truck are selected for the post inland transport.
- From that moment the truck must remain on stand-by outside the port area waiting to be called for loading by way of its registration number which is one of the key data parameters for the all administrative and customs processes
- Before being called for loading, goods must be subjected to local customs and foreign trade procedures, in particular, a customs declaration must be lodged on behalf of the owner (consignee of the goods) and transit procedures must be organized (guarantee purchased and paid).
  
  Delays are encountered because required documents are not available on time.
  
  Only then, the truck is authorized to enter the port area.
  
  This process takes on average up to 5 working days.

  Acting on this aspect would result in saving 3 to 4 days.

- customs authorization for loading is granted (either for the start of the inter State transport trip or for moving the goods to temporary storage in the port or in the neighborhood)
- the truck is then loaded and
  
  o on the one hand, customs transit formalities start (representative of the owner of the goods places the TRIE or transit declaration to customs linked to the guarantee obtained, and customs validates
    
    Tracking instruments (GPS) are placed in the load compartment when applicable
    
    Customs seal the truck and issue the approved customs transit document and the authorization to leave the port area
  
  o on the other hand, the carrier must purchase at the Shippers Council of the destination country the consignment note it will need to enter the destination country and obtain from its national shippers council the consignment note that will be valid on the departure country’s territory
This process takes on average a total of 3 to 4 days.

Acting on these aspects would save 2 to 3 days

- The departure from the port area does not mean the departure for the transport as in most of the cases, the driver has to park and wait for his 50% transport fees payment. This can take up to 5 working days on average and often results in failure of the transport to transit the coastal country territory within the customs stipulated timeframes

  Acting on this aspect would result in savings of 3 to 5 days

- Once the truck departs it is further subjected to various legal and illegal controls en route.

  Acting on this aspect would save 0.5 day

- On arrival at the first en route border post, the Customs transit document must be discharged, and when applicable the tracking device must be taken out of the load compartment. This takes from 2 to 4 days

  Acting on this aspect would result in savings of 1 to 2 days

- On arrival on the other side of the border, due to lack of mutual recognition and absence of exchange of transit data between customs of the country of exit to customs of the country of entry, a broker must lodge a new transit declaration.

  On his side, the owner of the goods will have completed a pre import procedure without which the transport is not allowed to continue

  Additional time and expense are expended for placing, when applicable, a new tracking device onboard, as such systems are deployed nationally without mutual recognition between transit countries.

  This again takes between 2 to 4 days.

  Acting on these aspects would save up to 2 days

- On arrival at destination, even if covered by a transit declaration, the truck is not offloaded until the consignee has finalized the import procedure and settled the import taxes and duties.

  The vehicle is used for temporary storage of the goods with no compensation at all.

  The average reported delay is up to 10 days.

  Acting on this aspect would result in savings of at least 10 days

It should be noted that the road transport operator is literally dependent on somebody else’s actions or inactions at each stage of the transit process.

As a result of these complex procedures as outlined above, the final delivery of goods (general cargo) from Abidjan to Ouagadougou takes about 25 days and often more (from the moment the carrier is selected to final delivery) for a trip of 1 250 Km and a transport fee amounting to between 1 300 000 to 1 500 000 F CFA for a truck, a driver and an assistant undertaking the task.

It is evident that such operating conditions are not profitable nor economically viable and therefore not attractive for most investors.
Finally, it should be observed that about 60% of inter States transport carries goods from coastal countries to the hinterland with empty return trips which impacts negatively on the profitability of the sector.

3. Lack of profitability

There is a general misconception that, given the very high transport costs in the region, the sector is profitable for the transport operator. In reality, a clear distinction needs to be made between the overall logistics costs on a particular route and the share of such costs that accrues to the road transport operator. On corridors such as the Abidjan – Bamako or Ouagadougou, only about 50% of the overall logistics costs for the road leg between port and destination relates to actual transport costs.

According to information received from road transport market operators on these corridors, the shipper pays an overall amount of around 3 million F CFA of which about 1, 3 to 1, 5 million F CFA (with overloading), is paid to the road carrier for the actual carriage of goods services for a trip on the average of say, 25 days from Abidjan to Ouagadougou. Effectively this means that the road transport operator on this corridor manages to undertake only one trip in a month for which he earns a maximum of 1, 5 million F CFA only from his truck. The other 1, 5 million F CFA is shared between Coxers, intermediaries and illegal payments en route for no real value added to the logistics chain. This all adds up to an unprofitable venture for the road transport operator.

4. Unfair tariffs

As indicated in the Assessment of the sector’s situation (Report 1) above, the available freight is in the hands of intermediaries and the tariffs they fix are expressed for the carriers in F CFA per Ton /Km.

- This practice has many negative consequences in that:
- It does not take into account the real cost of transportation of the goods
- It does not take into account the duration of the trip (including the time of mobilization of the vehicle, driver and crew) from departure to unloading (up to 25 days for Abidjan – Ouagadougou or Bamako)
- It gives the carrier the impression that in order to gain more it should load more thus creating incentives for overloading, whilst in reality, overloading is detrimental to the profitability of the transport companies and creates grounds for unfair competition

5. Outdated fleet of vehicles

It is self-evident in Western and Central Africa that the fleet of commercial vehicles is in majority outdated.

It is observed that the issue of the over-aged fleet has sometimes been misconstrued as the cause for the poor performance of the road transport sector when in reality it is a consequence of the poor economic fundamentals of the sector that is unable to attract any meaningful investment due to lack of profitability.
The poor operating conditions, the low tariffs and the lack of profitability are the real sources of the over-aged fleet, a situation that is aggravated by the damage to the fleet resultant from the effects of overloading practices.

The lack of profitability further impedes investment and financing for fleet renewal and necessary expansion.

The continued use of old trucks, on the other hand, invariably increases operating cost such as fuel consumption, pneumatics, and lubricants which contributes to the aggravation of the economic situation of road transport operators.

It also generates unreliability of the services due to repeated breakdowns and immobilization of vehicles, poor service performance, non-compliance with road worthiness and safety standards, etc. It is also observed that the few operators that may obtain credits and loans are often not in a position to reimburse the loans as a result of the unprofitable operations.

The cumulative effect of all these negative factors is the existence of a road transport sector that is unreliable and considered too risky to invest in or loan to by banks and other financial institutions.

6. Development of own account transport

It has also been observed at national and inter States transport levels that the resultant poor performance of the professional road transport sector operators (for hire and reward) has pushed importers and traders to develop their own in-house transport systems. As a result, it is estimated that 60 to 80% of road transport operations at national and inter States levels are in fact own account transport operations.

The development of own account transport to the detriment of the professional road transport operators has further contributed to the diminished economic significance and importance of the professional road transport sector and further limited its capacity to develop. Additionally, it is observed that own account transport operators are also illegally undertaking commercial transport activities for hire and reward thus competing with the professional road transport sector operators.

Furthermore, own account transport is not subject to inter State authorizations or any regulation. Therefore, while inter States transport for hire and reward is regulated, own account activities are not regulated at both regional and bilateral levels. This situation may jeopardize and complicate any attempts to regulate inter State public transport.

Whilst in some countries national legislation has attempted to define own account transport, most countries have not. In other countries, own account transport is considered to be any form of transport that is not for hire or reward.

On the other hand, transport for hire and reward is generally defined as an activity consisting in transportation of goods or passengers, with commercial road vehicles, for reward and remuneration in circumstances where the activity is carried out as the main economic activity of the company and as a profession.

This lack of common approach and definitions results in different interpretations of the concept of own account transport and unfair competition with professional transport operators (at national and
inter States levels) and further complicates the implementation of the inter States rules governing public transport.

1.3.4 Institutional aspects

1. Lack of visibility of the transport sector in development policies

In most of the Western and Central African countries, the Road Transport sector is not considered as a key economic sector and even less as an industry while it is the prominent mode of transport for both passengers and goods at national or inter States levels.

It is also generally observed at continental, regional, sub regional and national levels that transport appears in development strategies only through infrastructure projects (highways, bridges, roads, ports…) while the sector itself, its stakeholders in particular, its development, its operating conditions are disregarded. Moreover, the transport sector is stigmatized as being unreliable and unprofessional and transport services are considered as being of very low quality.

This lack of visibility of the Road Transport Sector and its bad image further contribute negatively to the disorganization of this key economic sector.

2. Low implementation of existing regional instruments

Many regional instruments have been developed to organize and facilitate inter States transport, including the following:

For ECOWAS:

- Convention A/P.4/5/82 relating to inter-State road transport of goods signed in Cotonou on 29 May 1982
- Additional Act A/SA.17/02/12 relating to the harmonization of standards and control procedures for size, weight and axel loads of heavy vehicles transporting goods
- Convention A/P4/5/82 on inter States transit of goods (Known as TRIE Convention) signed in Cotonou on 29 May 1982
- Additional Convention A/SP/1/5/90 instituting a TRIE guarantee mechanism adopted on 30 May 1990 in Banjul

For WAEMU/UEMOA:

- Regulation N°14/2005/CM/UEMOA, 16 December 2005 relating to the harmonization of standards and control procedures for size, weight and axel loads of heavy vehicles transporting goods in the Union
- Decision n° 15/2005/CM/UEMOA, 16 Decembre 2005 related to a regional control plan and Directive n°08/2005/CM/UEMOA, 16 Decembre 2005 relating to the decrease of the number of check points on the Union corridors
- Decision N°39/2008/CM/UEMOA, 17 Decembre 2009 related to Corridors and their management
- Regulation N°15/2009/CM/UEMOA, 17 Decembre 2009 relating to the legal status of joint borders control post
For CEMAC:

- 1991, Heads of States decision on inter-States transport system for Central African countries (known as TIPAC)
- ACTE No. 596 - UDEAC - 612 - CE – 31 regulating the Access to the profession of goods road transport operators (Portant réglementation des conditions d’exercice de la Profession de Transporteur Routier Inter-Etat de Marchandises Diverses)
- Regional Economic Program 2011 – 2015 (Programme économique régional)

However, while these instruments address key and well-known issues, their implementation is lacking at national levels thus impeding operators from benefiting from their provisions in terms of harmonization of conditions, documents and procedures essentially due to lack of mutual confidence amongst States.

3. Lack of enforcement of existing rules

One of the reasons for the lack of implementation of the regional instruments results from the lack of common vision when it comes to enforcement and implementation. Indeed, each State is keen to favor its own operators and is reluctant to accept other States to impose penalties or sanctions on them. For example, with respect to the application of the UEMOA Regulation 14, as soon as one country decided to fight overloading and stopped overloaded trucks from transiting its territory, immediate diplomatic action was undertaken to obtain the liberation of immobilized trucks.

In fact, regional integration will only be realized if all road transport operators are governed by the same regime of controls and regulations that allow for the development of conducive bilateral and regional trade and transport conditions. Developing a common vision of regional integration implies developing a common vision of the regulatory environment and in particular, in terms of equal control and enforcement of the rules.

However, it should be acknowledged that in these regions, as is stated by the operators themselves, “a truck is seen as a cash machine for the control authorities”. Illegal and abusive control practices are endemic and should be subject to a renewed attention by the RECS.

1.4 Conclusion/Recommendations

This assessment of the road transport sector situation in Western and Central Africa demonstrates the need for a defined and ambitious road transport strategy aimed at resolving the real obstacles faced by the sector to allow it to become an efficient economic sector.

The assessment also highlights the inevitable dependence that exists between inter States road transport sector and national road transport sector. Inter State transport market is rooted in the national transport sector. As a result, no progress can be made in developing inter States Transport Sector without first organizing and developing national road transport sectors through a coordinated regional approach.

Indeed, it appears that the road transport sector situation is harshly conditioned by external factors that are impacting on the capacity of the sector to develop itself. The abrupt liberalization of the national transport markets has created further disturbances that have severely contributed to the deterioration of the sector’s capacity due to the lack of accompanying and transitional measures, to allow the sector to adjust step by step to the new environment as was the case in the EU.
Furthermore, it is highlighted that specific corrective actions aimed at improving operational conditions would allow the sector to become more efficient and profitable, which in turn would result in better services and a reduction of operating costs with an immediate positive impact on overall logistics costs.

Indeed, whilst it is often argued that road transport costs are very high, it is in fact overall logistics costs that are very high due to poor logistics performance while road transport operators’ income is by far too low to really cover its current operating costs. However, it is also demonstrated that internal issues such as lack of professionalism of the road transport operators has negative impact on the sector’s capacity to develop.

The assessment of the sector’s situation illustrates the need to act at two different but complementary and interrelated levels namely, the Organization and Access to the profession on the one hand and the Professionalization of the transport chain’s stakeholders and Organization of the transport market on the other to restore optimal operating conditions.

The Comprehensive Transport Sector Guidelines have been developed, based on the assessment’s conclusions, to target both aspects and are presented in two reports:

- Regional Harmonization of the regional road freight industry in terms of access to profession, standards, regulations control and enforcement
- Measures for liberalizing and financing the road transport industry

The implementation of the recommendations presented in these reports suggest concrete actions to be undertaken at national level in a regionally coordinated manner and should guide RECs and their respective Member States in their coordinated efforts to pave the way towards the emergence of a sustainable and efficient Road Transport Industry in Africa.

Finally, these recommendations may help RECs and their Member States in identifying their needs in terms of financial and technical assistance to facilitate and ensure their successful implementation.

2 Regional Harmonization of the Regional Freight Industry (Access to profession, standards, regulations control & enforcement)

The analysis presented below is based on the principle that no progress can be made in developing a regional road transport industry without first organizing and developing national road transport sectors through a regional coordinated approach.

The guidelines and recommendations presented below should be considered as a package of interrelated concrete actions aimed at addressing the issue of the organization and access to the road transport profession within each country with a view to establishing the basis for a sustainable and reliable road transport industry within West and Central African regions.

2.1 Acknowledging the key role of the Road Transport Industry to achieve economic and trade development as well as Regional integration

It is recommended to undertake a range of actions to remedy the identified lack of visibility of the road transport sector amongst the trade and development policies and create the necessary conditions
for an effective and competitive Road Transport Sector to emerge at national level in a regional coordinated manner.

The three main recommendations entail:

- Increasing the visibility of Road Transport in development policies
- Organizing the Professional Representation of the Road Transport Industry at national level within a regional perspective
- Adopting and implementing Permanent consultative structures within the road transport sector

These three institutional components are interrelated and essential for developing an African Road Transport Industry. It is therefore difficult to prioritize these actions as they should be undertaken almost simultaneously and in a coordinated manner.

2.1.1 Increasing the visibility of Road Transport in development policies

1. Findings

While freedom of transit and free circulation of goods and persons are key components of the Regional Economic Communities objectives, the transport related component of these objectives is not visible or fully articulated in overall regional policies and national development strategies.

Indeed, while much effort has been spent in developing and implementing infrastructure programs, very little has been done to develop a comprehensive transport policy focused on organizing and structuring the transport sector to allow freedom of transit and free circulation of goods and persons to be realized.

2. Recommendation for defining a Road Transport Development Strategy

In order to create the foundation for facilitating the emergence of an African Road Transport Industry, it would be desirable to adopt at Regional levels a Road Transport Development Strategy which would become an integral component of the Regional Development Strategy and Policy as a basis upon which the Member States would implement at national level the Regional initiatives.

i. Methodology to follow and objective pursued

The crafting of a Regional Road Transport Development Strategy cannot be confined to the RECs executive bodies’ level only.

Indeed, the Road Transport Development Strategy should aim at resolving the existing and identified obstacles to the development of sustainable road transport services at national and regional levels and address key factors through general principles that Member States would have to define in their respective national legislation and incorporate in their bilateral road transport agreements.

This implies that:

- Member States should initiate regional consultations to reach an agreement on the identification of key obstacles and issues to be resolved and define jointly their vision for the development of the road transport sector
• RECs executive bodies, based on Member States views and positions would propose a draft Road Transport Development Strategy and an implementation monitoring mechanism

• Member States should be afforded an opportunity to discuss and approve the regional Road Transport Development Strategy and its implementation monitoring mechanism.

**ii. Key components of the Road Transport Development Strategy**

The **Road Transport Development Strategy** should focus in particular on the following key aspects:

• Organize regional conditions for creating sustainable professional representation of the sector at national and regional levels (create National Road Transport Associations able to interact at regional level)

• Proposing a regional framework for the establishment of permanent consultative structures at national and regional levels on issues of road transport policy

• Develop a set of rules and guidelines to organize and strengthen at national level in each Member State the national road transport sector and national road transport market based on common regional standards to allow the inter State road transport sector to emerge on the basis of equal opportunities and fair competition

As far as “organizing regional conditions for creating sustainable professional representation of the sector at national and regional levels” and “proposing a regional framework for the establishment of permanent consultative structures at national and regional levels in the fields of road transport policy” are concerned, it should be kept in mind that in order to create an appropriate culture and practice of consultation between the Governments and the road transport sector stakeholders, a two-step approach should be adopted within the Road Transport Development Strategy.

The **first step** would focus on structuring the professional representation of the sector through the creation at country levels of National Road Transport Federations based on a harmonized and coordinated regional approach.

The **second step**, once the first step has been initiated, would focus on creating at country levels National Transport Councils to organize the public-private sectoral dialogue also based on a harmonized and coordinated regional approach.

The success of this approach will depend on the establishment at country levels of the National Road Transport Federations duly recognized by the authorities as the official representatives of the sector. Indeed, meaningful dialogue can only be achieved through structured professional representation of the sector that is considered by Governments as partners contributing to the public-private sector dialogue through constructive proposals.

**2.1.2 Organize the Professional Representation of the Road Transport Industry at national level within a regional perspective**

**1. Findings**

In Western and Central Africa, the road transport sector which is involved in domestic operations or inter States traffic, is characterized by its fragmentation. It is indeed composed of a variety of small operators often acting informally and outside existing regulations.
The fragmentation of the sector that has been aggravated by the sudden liberalization over the last 15 years has also influenced the structure of the professional representation of the sector. A multiplicity of local syndicates has also emerged in most countries and involves itself in areas which outside its competence such as, for example, the freight distribution category.

This dispersion in numbers as well as from the geographical point of view impedes, on the one hand, the profession itself from defining its own policy and voice it towards Government and, on the other hand, the Government from entering into constructive dialogue with the profession due to the multiplicity of dispersion of the representative organizations.

**BOX: 2**

**Successful experience in Ivory Coast**

Some countries such as Ivory Coast or Burkina Faso have realized the benefit they would derive if the professional representations were unified through a Federation that would bring together the various small local syndicates and become the voice of the profession.

In Ivory Coast, the Minister of Transport initiated the creation of a High Council of Owners of Road Transport Companies of Ivory Coast (Haut Conseil du Patronat des Entreprises de Transport Routier de Cote d'Ivoire HCPETR-CI) which has amalgamated at national level more than 250 local syndicates.

The Minister managed to create the favorable environment for dispersed organizations to merge and become more visible and stronger. Under the Minister of Transport’s motivation, the HCPETR-CI was formally established in 2014 and it is gradually becoming the voice of the road transport industry (both goods and passengers) and the interface with the Government for road transport issues. Indeed, it is increasingly consulted at national level on transport policy issues and regional and bilateral transport matters. The Regional branches of the HCPETR-CI are also being structured step by step and are becoming the favored interface with regional and local authorities.

It is also contributing to the work of regional institutions (UEMOA and ECOWAS).

Similar efforts are being undertaken in Burkina Faso to merge isolated syndicates into one Organisation.

**2. Recommendation for a regional approach to create in RECs Member States National Road Transport Federations**

The ongoing efforts in both countries mentioned above allow for the identification of key elements (such as Minister’s leadership, create ownership conditions, key role and functions of the Federation) to be taken into account in defining the basic conditions for the organisation of the professional representation of the road transport sector at national level in a regionally coordinated manner.

It should also be noted that international road transport operators in Western and Central Africa are participants at both the domestic market and inter States transport levels. Therefore, the sectoral representation at national level should aim at mobilizing and representing all stakeholders in order to be in a position to provide similar leadership and representation to the work of the regional institutions.

It should be acknowledged that RECs involvement in the road transport sector would only be meaningful and effective if road transport professionals are involved in the process in order to come up with realistic stakeholder driven policies and decisions.

It would seem naïve to think that such involvement of road transport professionals in the work of the RECs can be harnessed without being based on strong National Road Transport Federations which would gather and represent most of the operators at national level.
It is also clear that RECs have no direct role to play at national level in organizing the national federations.

However, in the framework of the Regional Integration process, RECs could play a supporting role towards their Member States, based on Member States best practices and experience, in defining Specifications or Terms of Reference to guide their Member states in the approach to be followed in creating National Road Transport Federations that would be involved in the RECs work related to road transport issues.

**BOX: 3**

**Component of Specifications or Terms of Reference for the creation of a National Road Transport Federation**

Personal leadership by the Minister of Transport to motivate and ensure adherence of all syndicates to the approach

Organisation of a General Road Transport Conference grouping all local and isolated Syndicates active in goods and passengers’ road transport to validate the principle of the creation of a National Road Transport Federation

Draft regional guidelines defining the status and operating framework of the National Federation to be created and definition of the criteria for its membership (number of members, number of vehicles used by its members, number of employees by its members…)

Draft regional guidelines for structuring the work of the National Federation in addressing the various issues through specialized committees as follows: Committee on freight market issues

- Specialized committees for specialised transport (tankers, perishable food stuff, wood, bulk, pre and post maritime transport…)
- Committee for inter States transport responsible for all inter States and bilateral road transport issues and negotiations

Definition of the key roles and functions of the National Road Transport Federation which include:

- Being the sole interface with the Government for all road transport matters including for negotiations of bilateral or multilateral transport agreements
- Being the sole representative of the sector towards other professions and economic groupings (Chamber of Commerce, other economic branches…)
- Being the sole platform for social dialogue and related issues for all entrepreneurs in the road transport sector
- Being the sole representative of the sector for regional or bilateral discussions or negotiations of road transport related issues
- Being the implementing partner of the Ministry of transport for certain road transportation related aspects such as:
  - Validation of certificates of good standing and repute for registration of transport companies
  - Validation of authorizations issued for bilateral or inter States transport operations
  - Advice on sanctions and penalties to be imposed for non-compliant companies or operators
  - Definition of training programs for access to profession as well as for professional drivers
  - Validation of training institutes accreditation
  - Assistance to the formalization of informal operators

Definition of services to the profession (general defense of the profession interests, but also technical and legal assistance to members…)

Prohibition of any involvement in freight commercialization and distribution
While the Minister of Transport should initiate the formation of the National Road Transport Federation, its legal status should be that of a professional members’ association, self-regulating and financing and independent from public authorities’ controls.

2.1.3 Adopt and implement Permanent concertation structures with the road transport sector

1. Findings

The culture of consultation and liaison with the private sector is not widely spread in Western and Central Africa and particularly with respect to the road transport sector issues.

As stated above, the fragmentation of the sector largely explains this finding. However, it is also acknowledged that no progress can be made in modernizing or reforming an economic sector without the close involvement of professionals concerned in the definition of the needs and measures to be adopted and implemented.

While there is a need for the establishment of National Road Transport Federations to represent the sector in each RECs’ Member States based on harmonized guidelines as proposed above, there is also a need to create in each Member State a permanent structure that fosters systematic consultation with and within the profession.

RECs could support their Member States in defining guidelines for the establishment by their Member States of National Transport Councils.

2. Recommendations on a regional approach for the creation National Transport Councils by RECs’ Member States

In order to accompany the development of the road transport sector at national and regional levels, in the framework of the regional Road Transport Development Strategy defined by RECs’ Member States with the participation of the proposed National Road Transport Federations, the establishment at national level of National Road Transport Councils is imperative to ensure that the efforts undertaken meet the needs and get support from the sector’s key stakeholders.

Indeed, any approach to new rules or reform requires to create the necessary ownership by key stakeholders to ensure its successful implementation.

Whilst it may seem that RECs have no mandate nor competence to be directly involved in the definition of such National Road Transport Councils, RECs should play an advisory role and assist their Member States in the adaptation of regional Guidelines for the harmonized establishment of National Road Transport Councils.

BOX: 4

Key elements to propose in Regional Guidelines for ensuring a harmonized establishment of National Road Transport Councils

The objectives of the National Road Transport Council:

A harmonised approach is needed to ensure uniformity and consistency amongst Member States practices in defining the objectives of the National Road Transport Council which could include the following:

Contribute to the Drafting of the Road Transport Development Strategy
Consult key stakeholders on any draft law or regulation affecting Road Transport (passengers and goods) before it is adopted in order to benefit from the input of the stakeholders and create ownership to facilitate implementation.

Establish mechanisms for collecting and aggregating relevant data and statistics on the road transport sector and discern some key indicators and trends

Contribute to discussions related to other policies as long as they affect road transport such as Customs regulation (in particular Transit), trade facilitation in general (traffic check points and controls, tariff and non-tariffs barriers…)

Foster national consensus and common positions for the bilateral or inter States discussions or negotiations

Monitor the functioning of key corridors

Determine and evaluate global best practices that could be adopted at national level as well as at regional or sub-regional levels

Composition of the National Road Transport Council

It is recommended that the participation of the following stakeholders from Public and Private sectors be considered in a harmonized manner:

- Ministry of Transport
- Ministry of Trade or Commerce
- Ministry of foreign affairs and regional integration
- Ministry of finance and planning
- Customs Authorities
- Enforcement Agencies (Police, Gendarmerie…)
- National Road Transport Federation
- Associations of road transport users and clients
- Chamber of Commerce
- Associations representing the interests of road transport related professions (Forwarders, “commissionaires”, freight brokers, intermediaries)
- Representatives of other modes of transport particularly when discussions will focus on intermodal policy and technics

The positioning of the National Road Transport Council within the established consultation structures

Further to the adoption of the WTO Agreement on Trade Facilitation, WTO Member States will have to organize at national level a “National Trade Facilitation Committee” to facilitate the implementation of the agreement, discuss, and agree on the measures to be implemented in this context.

Therefore, the creation of National Road Transport Councils should not result in a multiplicity of entities dealing with similar issues but, to the contrary, be used as a forum that seeks to maximize on sector specific stakeholder efforts through a structured coordination of efforts and sharing of experience and knowledge.

In this context, the RECs may recommend that the National Road Transport Council be structured as a sub-committee of the National Trade Facilitation Committee.

Such an approach will:

- Avoid duplication of work
- Ensure that road transport is duly considered as a component of the global trade facilitation policy
Facilitate coordination and participation of the key stakeholders in a holistic and structured manner

In order to add value at regional level from the contributions of the National Road Transport Councils, RECs may consider involving them in their respective work on road transport by inviting each National Road Transport Councils to appoint one representative to participate in meetings at RECs level.

**Organisation of the work and reporting**

RECs, based on their own method of work and experience should define guidelines for the organisation of the work of the National Road Transport Councils and propose harmonized rules of procedure stipulating:

- The frequency of meetings (monthly, for example, at least at the beginning)
- Convening of meetings, issuing Agendas for meetings, working documents and reports and the time for their submission, quorum
- Defining the voting methods (majority rule, secret ballot or show of hands…)
- Defining the reporting methods to the Minister of Transport and to the National Trade Facilitation Committee

### 2.2 Structuring and organizing the Road Transport Sector at national and regional levels

The current disorder governing the road transport sector is identified as one of the key obstacles that needs to be addressed to ensure that a professional African Road Transport Industry emerges at national and regional levels.

#### 2.2.1 Define rules for accessing the Road Transport profession

**1. Findings**

The poor performance of road transport services, its poor profitability while overall logistics costs are very high, are the direct result of lack of professionalism of the stakeholders, which when coupled with other factors (economic conditions, access to freight…), jeopardizes the emergence of an African road transport industry.

Some countries have initiated reforms to introduce modern rules for access to the profession. They could serve as regional best practices.

**BOX: 5**

**The experience of Ivory Coast**

Ivory Coast adopted a Law for the organisation of inland transports (Loi d’organisation des Transports Intérieurs, LOTI) in December 2014.

While this law brings a lot of innovative initiatives, it also prescribes the access to profession rules that were then proclaimed in a decree from April 2015.

The law and its implementing Decree introduced, for the first time in addition to usual administrative conditions, some qualitative conditions for one to be authorized to act as a road transport operator and be recorded in the Register of road carriers:

- Only commercial companies can be registered as road carrier (no individual)
- Being Ivory Coast citizen or ECOWAS resident
- Being established in Ivory Coast
- Using at least one commercial vehicle registered in Ivory Coast
The manager should be holder of a Certificate of Professional Competence
The manager and shareholders must prove good standing and reputation
The company must demonstrate financial capacity

The implementation of these principles is still not complete, some delays are experienced due to slow administrative and decision making processes.

Transport operators willing to obtain inter States transport authorization will have to meet these national conditions and requirements before getting access to the inter States transport market.

This example illustrates how access to the inter States market is dependent on the national legislations and regulatory frameworks on access to the profession. It also illustrates how important it is, for purposes of equal and fair competition, for member States to adopt at regional level harmonized rules for access to the profession.

2. Recommendations for the adoption and implementation of harmonized rules for the access to the profession

Based on international standards and on national experiences such as those of Ivory Coast, RECs could be the forum where Member States could elaborate a regional and common approach to this important aspect to ensure harmonized conditions for access to the profession, thus contributing to creating harmonized competition conditions for developing access to inter States road transport markets.

Due to the impact of access rules in terms of conception, gradual implementation and the need to adjust to local circumstances to allow existing operators to meet the new requirements in due course, RECs should prioritize their involvement with their Member States to the following aspects:

- Inventory of the existing situation and capabilities at national level
- Definition of the recommended conditions and requirements for road transport operators
- Definition of realistic implementation dates taking into account effective capabilities and appropriate transitional periods granted to existing operators to meet the new conditions

i. Inventory of the existing situation and capabilities at national level

While it is relatively easy to prescribe rules for access to the profession, their prescription should not overlook or ignore the realities of the existing situation and capabilities of the public and private sector to cope with and effectively implement the new rules.

Therefore, it is of primary importance that the RECs encourage their Member States to undertake an inventory of the existing situation at national level. The results will guide the work of the RECs and their Member States in order to be in a position to recommend a framework and methodology to be followed at national level for the introduction and implementation of the new rules.

BOX: 6
Example of questionnaire to be used

Number of carriers (passenger and goods)
Description of the fleet (type, age and number of vehicles involved in public and own account transport)
**Definition of public and own account transport**

Basic conditions to be allowed to act on the transport market (public or own account)

Types of documents required to register as a transport operator (goods and passengers, public and own account)

Existence of dedicated training centers (dedicated to transport and logistics) and if existing, their capacity (number of students), type of training programs, levels of diplomas offered

These basic elements will be consolidated at RECs level and will allow RECs in consultation and coordination with their Member States to evaluate the needs and the time needed to implement the new rules or to implement them gradually according to a defined implementing plan for which the RECs could propose a framework and methodology to be followed.

In addition, this inventory will also contribute to the estimation of the potential financial or technical assistance needs of the countries. Countries, with RECs support, will be in a better position to define their requests for Technical and Financial assistance to development partners and financial institutions.

**ii. Elaboration of harmonized conditions and requirements for access to the road transport profession**

Inter States transport is organized and regulated at RECs level. Both ECOWAS and CEMAC instruments reserve international transport to operators that are:

- Firstly, registered at national level as road transport operators according to national rules, and
- Secondly, obtain the required authorization to operate at inter State level.

RECs instruments do not specify any special condition for accessing the profession. Therefore, access to inter States transport is dependent upon the way RECs’ Member States regulate their national access to the profession.

Almost all countries in the two regions have adopted laws and regulations that require that public (goods and passengers) and own account transport operators be registered with a central Transport Registry. The registration at national level according to national law is a pre-requisite to obtaining inter States authorizations.

However, this registration usually is of an administrative nature, based on the submission of a number of administrative documents (birth certificate, certificate of permanent residence, copy of identity card, status of the company…), and is not dependent on the satisfaction of any special quality criteria such as professional competence or professional experience.

Whilst international best practices also recommend the condition of registration, the registration can only be obtained when a combination of four requirements are met, namely:

- Establishment in one Member State
- Professional competence of the manager of the company
- Integrity and good standing and reputation of the Manager and company owner(s)
- Financial capacity of the company to operate in a sustainable manner
In addition, due consideration should be given to the potential benefits to be derived from registration as an incentive for the informal sector to formalize itself. Indeed, whilst previous attempts at the “eradication of the informal sector” produced no result, it should be acknowledged that the issue is so complex and has some deep social and economic consequences such that it should not be viewed as an attempt to eliminate the informal sector but as an opportunity to formalize it. Indeed, most informal operators are satisfied with their current situation, and the only chance to solve the problem is by creating compelling incentives for them to formalize themselves.

The introduction of access to the profession rules should be seen as an opportunity not to exclude informal operators but to attract them to the formal sector as they indeed have the experience and knowledge that would be beneficial to the formal sector.

Furthermore, it could be considered that access to the profession should be restricted to only commercial entities (legal commercial companies). In that case, informal operators may be encouraged to constitute their activities under the OHADA regime of commercial company with unique shareholder requirements that are not very demanding in terms of funding or administrative formalities but have the advantage of according formal commercial legal status to the informal undertaking.

**RECs may consider working with their Member States in order to agree on a harmonized approach for the definition of the conditions for accessing the profession on the following basis:**

**a) Establishment in one Member State**

The condition of establishment is very common. A company willing either to obtain its registration as own account or public transport operator should be established in the country where it registers the activity or be established in any one member State of the REC to which the country of registration belongs.

However, the RECs could define, based on the Member States practices, the list of documents that should be required for both types of applicants for Registration purposes (own account or road transport for hire and reward) such as:

- Commercial Registration certificates
- Status of company in terms of operating licenses
- Title deeds or leasing contracts for the company’s offices and buildings
- Bank account in the country of registration….

**b) Professional competence of the manager of the company**

Based on the inventory drawn up by the Member States as recommended above, RECs could valuably define minimum standard conditions to be met by the managers of road transport companies or undertakings and the way these conditions can be satisfied.

**Therefore, RECs may consider producing a set of consolidated recommended practices to constitute the professional competence condition based on their Member States capacities and domesticated international best practice standards.**
When the programs and modalities for training are defined, RECs may consider defining best practices to constitute in a harmonized manner the accreditation of training institutes.

RECs may also recommend best practices for the definition of the examinations conditions.

BOX: 7

The definition of the ways and means to be used to comply with the professional competence criteria that would be evidenced by a Certificate of Professional Competence (CPC).

Three basic possibilities should be offered:

Passing an examination to obtain the CPC

RECs could valuably establish the list of required competencies to be sanctioned by way of an examination and that should at least cover the following areas:

- Financial and accounting
- Road transport management and operations
- Legal aspects (access to profession rules, corporate basics, road transport contractual environment and insurance)
- Social aspects (staff management, driving and resting times rules…)
- Technical (vehicle technical standards and maintenance)
- Road safety and traffic rules
- Special transport (dangerous goods and perishable food stuff)
- International transport (RECs instruments)

On this basis, RECs could define and derive training programs to be implemented by accredited institutes to prepare operators for the examinations.

Justifying of an equivalent diploma to the CPC

RECs could define the criteria to be used to define the list of diplomas that could be recognised as equivalent to the CPC such as BAC +2 in accounting or in logistics.

Justification of successful professional experience in managing road transport activities

This criterion is of paramount importance as it is the one that will allow most of the existing operators to qualify and obtain the CPC without having to undertake and pass the examination.

RECs could propose the following approach:

- Prescribe the minimum period in a managerial position in a road transport company (5 to 10 years are usually selected)
- Define the list of documents to be produced as evidence of such experience (working contract, job description, commercial power of attorney allowing the take decisions including financially…).
BOX: 8

Best practices for Training Centers’ accreditation processes

RECs should elaborate a procedure to be followed at national level to harmonize the accreditation processes for Training Centers to be authorized to deliver training of the agreed programs.

This procedure could address the following issues:

- Training centers minimum equipment’s and facilities (physical capacity, training material, IT equipment is…)
- Period of validity of the accreditation and conditions for its renewal (at the beginning a 3 to 5 years period allows proper monitoring)
- Selection process for the trainers and definition of train the trainers programs

BOX: 9

Definition of examination conditions

RECs should facilitate the actions by the Member States by defining a set of guidelines on the organizational aspects of the examinations such as:

- Designation of the competent authority to take on the responsibility to organize the examinations for obtaining the CPC (Ministry of Transport)
- Composition of the Examinations Board to prepare the examinations and to validate the results
- The nature of the examinations (list of closed questions, practical case resolution, detailed work, combination of these)
- The frequency of the examinations (once a year, monthly …)

c) Integrity and good standing and reputation of the Manager and company owner(s)

RECs could facilitate consensus amongst their Member States to first recommend that this condition be imposed not only on the manager of the company, but also on the owner or shareholders of the company.

On a similar basis, RECs could also craft guidelines relating to what would constitute adequate justification that the condition is met such as:

- The absence of any convictions or similar sanctions for any offences over a given period of time
- A letter of recommendation from other operators or from the National Road Transport Federation.

d) Financial capacity of the company to operate in a sustainable manner

The criteria of financial capacity is likely to be variable from country to country as it needs to take into account the actual situation and economic fundamentals of the sector in each country concerned.
The EU example is not replicable in Western and Central Africa as it requires that the transport company justifies through its audited account of a minimum sum of its capital and reserves that should be at least equal to the result of the following calculation:

- 9,000 Euros for the first vehicle
- Plus 5,000 Euros per additional vehicle

However, taking into account that this criteria aims at ensuring the viability and the sustainability of the company, RECs and their Member States, based on the reality prevailing in the sector in the various countries would certainly not be in a position to come up with a common threshold to be applied by all countries. However, based on practical experience and on international best practice standards, RECs and their Member States could valuably compile a list of recommended parameters to be used to determine at national levels the thresholds to apply with respect to the financial capacity criteria.

It should be mentioned that road transport operators acting at inter States level in ECOWAS must possess a recognized ECOWAS traffic insurance policy.

### BOX: 10

**Key elements to consider in defining the financial capacity condition**

- A correlation between the Capital and reserves of the company and the number of vehicles owned or used on the basis of a leasing contract (with or without drivers)
- The existence of a bank account with a positive trend over a given period of time
- The existence of a positive balance sheet that satisfies pre-determined solvency thresholds
- Ownership of at least one operational commercial vehicle (with valid road worthiness certificate) or exclusive use of such a vehicle (on an exclusive use lease arrangement with or without driver)

**e) Restrict the registration to commercial entities**

Indeed, one of the most worrying aspects that is detrimental to the sustainability of road transport companies is the fact that individuals are acting as transport operators without being established as commercial entities. This leaves the door open for the proliferation of informal operators, who are not subject to basic fiscal and accounting obligations and rules, while commercial entities are obliged to satisfy certain conditions (bookkeeping, fiscal obligations…) thus creating grounds for unfair competition.

Therefore, recommendations or rules could be adopted that would not only help with better management of the sector but also with curtailing the proliferation of the informal sector.

To achieve this goal, RECs based on Member States consensus, could develop rules that would link the registration of road transport operators to the obligation to be established under a legal commercial status. By doing so individuals would not qualify anymore and would have to establish themselves as commercial companies (even with a unique shareholder as provided for by the OHADA revised unified rules adopted on 30 January 2014 in Ouagadougou) thus leading to a registration at the trade register and assuming certain fiscal and accounting obligations. Ivory Coast has successfully followed this path and registration of individuals is not allowed anymore.
while existing individual operators will, since May 2016, only be registered if they have moved to the status of commercial entity...

**BOX: 11**

**The example of Ivory Coast**

As per the Decree from April 2015, all existing road transport operators recorded in the Transport operators registers have to renew their registration and new operators have to register according to the new rules introduced by the law (LOTI).

However, individuals are not allowed to register or re-register anymore as they must first be constituted as a commercial company, even under the status of “Entreprise individuelle” to be able to obtain its registration.

Step by step, the individual operators are transforming their individual activities to commercial entities which is strengthening the sector.

**f) Prohibit access for certain other transport professions to limit unfair competition**

Following the example of the Ivory Coast Law for Inland Transports (Loi d’Orientation des Transports Intérieurs – LOTI and its implementing Regulation Décret 2015-269 dated 22 Avril 2015) it could be opportune to adopt a general rule that would prohibit the access to Road Transport Profession by certain other players such as:

- Maritime companies
- Shipping agents
- Stevedores

This prohibition aims at preventing unfair competition to the formal road transport sector, but does not restrict the creation by such companies of separate legal entities for road transport purposes. In such cases, the newly created companies will only be road transport operators and equally subject to all access to profession and market rules.

This should be supplemented by an appropriate regulation for access to transport intermediaries’ professions to prevent maritime companies and their subsidiaries from creating cartels around freight distribution through potential abuse of the absence of legal regulation of the profession in this regard.

**iii. Implementation dates and transitional conditions**

RECs may play a key advisory role in recommending their Member States to define the implementation dates of the new harmonized rules in order to ensure that, as from the entry into force date, all material conditions will be in place to allow compliance with the rules.

Indeed, it is important that, at the entry into force of the new rules, all facilities are in place to allow the implementation of the new rules. There would be no point in requiring a certificate of professional competence as part of the registration process if no duly accredited training institute is up and running and delivering the requisite training courses, examinations and their corresponding certificates?

This is the reason why the RECs should adopt a detailed strategy for the implementation of the new harmonized rules at national level and address the following key issues:

- Prescription of the date of implementation for new applicants, and
• Transitional conditions granted for the existing operators to comply with the new rules.

a) **The date of implementation should be carefully defined**

RECs could develop a methodology to assist their Member States in their actions leading to the implementation of the new harmonized accession to the profession rules based in particular on the following:

• A realistic action plan that will ensure at national level that all conditions are operational (for example: training centers are set, capacitated and operational)

• Appropriate instructions are issued to allow the administrative authorities in charge to apply the new rules

• Appropriate adjustments to the IT systems are implemented and tested before entry into force

• Appropriate training is organized for the officers in charge of the implementation

• Sensitization sessions are organized for all key stakeholders in conjunction with the National Road Transport Federations

b) **Transitional conditions granted for the existing operators to comply with the new rules**

The introduction of new rules for the new applicants should not lead to a discrimination between the new and the existing players as the overall objective of introducing new harmonized access rules is to ensure the professionalization of the entire sector.

In this regard, RECs could define realistic rules for the definition of the required transitional period and conditions granted to existing operators to comply with the new rules.

RECs could in particular address the following:

• Propose a recommended timeframe for existing operators to re-register their companies in accordance with the new conditions

• Propose a recommended timeframe for the companies to comply with the financial capacity condition (2 years would seem reasonable and acceptable)

• Propose the format of the update training that existing operators and managers must follow to obtain the CPC without going through the formal examinations (10 days dedicated to management, accounting and finance, road safety seems to be realistic)

2.2.2 Propose a Certificate of Competence for Professional Drivers

1. Findings

If the RECs have managed their Member states to adopt certain rules as far as driving licences are concerned, they remain general and only connected to the “driving” while it is increasingly acknowledged that professional drivers must not only be trained to drive vehicles but also to other aspects of their profession.
2. **Recommendation for the adoption of a Regional Certificate of Competence for Professional Drivers (CCPD)**

RECs could valuably assist their Member States in crafting harmonized guidelines defining the special additional training professional drivers should undertake in order to obtain, in addition to the driving license, a **Certificate of Competence for Professional Drivers (CCPD)**.

The RECs Guidelines for the Establishment of a Certificate of Competence for Professional Drivers should in particular address the following issues:

- Define the criteria applicable to the Drivers subject to the obligation of additional training (public and own account transport, goods and passengers, etc.)
- Define the list of competences to be assimilated and the training program for the initial training that will lead to obtaining the CCPD
- Define the conditions of accreditation of the training centers authorized to offer the training
- Define the frequency of renewal of the CCPD (every 5 year up to 50 years old seem reasonable and every 2 years thereafter)
- Define the programs for refresher training required for renewal of CCPDs

**Resultant from the implementation of these RECs guidelines, mutual recognition of CCPDs should be guaranteed for drivers operating in any other Member State than the one where he is established.**

2.2.3 **Define rules for accessing connected transport and logistics professions and transport intermediaries**

1. **Findings**

The sudden liberalization of the road transport market in Western and Central Africa has allowed the proliferation of informal intermediaries to penetrate the sector and capture the freight market distribution. The so-called “Coxers” have proliferated benefiting from a total lack of regulation of the intermediation professions; they act without any legal framework or legal liability rules. In particular, their names never appear on transport documents and they do not carry any liabilities or obligations and yet they get remunerated through a commission charged on the transport fee in a total opacity.

The cumulative effects of the involvement of Coxers and the increasing role of the maritime industry deprive most of the professional road transport operators from accessing the inter States transport market.

This highlights the crucial need to regulate the access to transport intermediary professions.

2. **Recommendations to organize professions of transport intermediaries and logistics service providers**

In order to ensure that all players of the transport and logistics chain are governed by harmonized conditions, RECs could valuably guide their Member States towards consensus on the need to set some rules to organize the access to these professions (intermediaries, Coxers, forwarders, brokers…), that could include the following:

- Establishment in one member state of the concerned REC
• Proven professional competence of the manager of the company (similar to Road Transport)
• Integrity and good standing and reputation of the owner, shareholders and managers (similar to Road transport)
• Financial capacity of the company (The sealing of the financial capacity should be defined in correlation with the volume of operations and turnover)
• Restrict access to only commercial companies (similar to Road Transport)

In addition to regulating the access to these professions, a legal framework for their operations should be developed to ensure that at regional level they act according to standard liability rules based on the following principles:

• The intermediary is responsible towards his client for the delivery of the goods
• The intermediary is liable towards his client in the selection of the carrier which will undertake the transportation
• The name of the intermediary must appear on the transport consignment note
• The intermediary becomes the shipper in the contractual relationship with the carriers
• The OHADA Uniform rules for the contract of carriage of goods applies fully to the relationship between the intermediary and the carrier

2.3 Activate and modernize existing Regional instruments

In Western and Central Africa, various regional and bilateral instruments have been developed to regulate, organize and facilitate road transport in particular for inter States transport.

However, in practice, it appears that the level of implementation of these regional instruments is very low for various reasons:

• The instruments have not been adapted to modern transport and customs technics and practices
• Bilateral approach is often favored
• The political will is often missing

2.3.1 Actions at regional level (modernization of legal instruments)

1. Findings

Indeed, Western and Central African RECs have developed several instruments to organize and facilitate road transport.

These instruments need to be reviewed and updated in line with the following recommendations so as to better address the real practices and make them more “implementable” than they currently are.

2. Recommendations to review and update the existing instruments

These instruments were mostly developed in the 80’s or 90’s and in the meantime, international trade and transport have evolved. However, the instruments could still play an important role in facilitating regional integration.
In this context, RECs could, in consultations with their Member States, initiate the updating of their key transport facilitation instruments by:

- Making for each instrument, an inventory that identifies:
  - The obsolete provisions
  - The provisions that have not been implemented and identify the reasons for the non-implementation (objective obstacles, lack of understanding…)
  - The aspects that are not covered by the instruments but which would need to be introduced (use of ICT, for example, in transport and customs operations)

- Asking member states to make proposals for modernizing the existing instruments

- Organizing review committees comprising public and private sector stakeholders, to review and propose amendments to the existing instruments

- Apply the revision and amendment provisions contained in the instruments to adopt proposed amendments agreed to

- Organize capacity building for the public and private sector stakeholders that will be involved in the implementation

As far as the ECOWAS TRIE Convention and CEMAC - ACTE No. 596 - UDEAC - 612 - CE – 31 are concerned, special attention should be paid to the following amendments to make the systems more workable:

- Introduce the use of ICT to facilitate the lodgment of electronic declarations and related guarantees. Most Countries are using ASYCUDA World transit modules that should facilitate this approach as well as the exchange of transit data amongst customs administrations

- Facilitate the coordination between the guarantors in particular as far as the sharing of guarantee fees are concerned

- Review the current guarantee requirements which are very high (0.5 % of the value of the goods) to move towards a guarantee requirement based on risk analysis and real exposure to fraud and introduce possible guarantee wavers for Authorized Economic Operators.

- Facilitate the Road Carrier eligibility to the TRIE through an accreditation process that could ease inter States transport

As far as the ECOWAS Convention organizing inter States transport is concerned, ECOWAS and its member States could review the convention in the following respects:

- Harmonize the authorization process, introduce a mechanism for sharing information on authorizations issued, suspended or revoked

- Introduce some key principles on access to profession rules for international operators

- Review the vehicle technical requirements to encourage and facilitate the use of modern and environmental friendly vehicles

- Introduce a standard and recognized Consignment note for inter States transport movements
As far as Customs Transit is concerned, RECs may focus on the modernization and implementation of their existing instruments rather than joining other conventions such as TIR, at least at this stage.

Indeed, the European TIR Convention is based on the key and central role of the Road Carrier that must meet certain conditions and requirements such as sound financial standing, ability to engage in international transport in order to benefit from the custom status of “Holder of TIR Carnet” and enjoy mutual recognition of its authorization in all contracting parties.

In Western and Central Africa the road transport industry situation prevents any immediate move in that direction. Indeed, in the light of the existing conditions in Western and Central Africa characterized by the fragmentation of the road transport sector that is not organized and where existing transport operators would not be in a position to really participate to this procedure, the usefulness of TIR is doubtful. Due consideration should also be paid to the structure of the international trade of the Western and Central African countries that is very different from that of Europe. Indeed, it is characterized by mostly imports implying that the implementation of the TIR procedures would mainly consist of accepting TIR carnets opened in Europe by European operators while at best, African carriers would only become sub-contractors of foreign companies. In the present circumstances, it would certainly result in reinforcing the dominant position of foreign freight integrators and maritime companies and limit further the emergence of a local independent transport industry.

Furthermore, the ongoing negotiations of Economic Partnership Agreements with the EU aim at implementing preferential treatment for certain goods that would not be subject to import or export taxes and duties in the future thus limiting the need for a transit system for these goods.

Therefore, RECs and their Member States should consider the usefulness of such international instruments in the light of the ongoing regional integration efforts that are oriented towards the creation of single customs territories where import taxes are collected at the entry point (port) and not at the destination of the goods. In this regard, RECs should also consider the efforts needed to implement a new system compared to the adaptation of existing known systems.

Finally, the positive implementation of the TRIE on a bilateral basis (Ivory Coast and Burkina Faso, Senegal and Mali) should be regarded as regional achievements that could be duplicated successfully on other corridors with the support of the RECs. Additionally, the use in a number of countries of ASYCUDA World facilitates the implementation of the TRIE and the sharing and exchange of data between neighboring countries customs authorities.

As far as Weight and axle load controls are concerned, RECs (ECOWAS and UEMOA) should concentrate their efforts on defining with their Member States common enforcement policy (see section below: IV Facilitate implementation through harmonized enforcement approach).

2.3.2 Actions at bilateral level

1. Findings

The general application by all RECs Member States appear to be difficult, however, experience has shown that through bilateral negotiations and agreements, innovative solutions can be found to activate at bilateral level the Regional instruments as is the case for the ECOWAS/CEDEAO TRIE convention on customs transit.
2. Recommendations to implement regional instruments through bilateral agreements

It is self-evident that the TRIE convention is not implemented at regional level due in particular to lack of mutual recognition of controls and documents as well as the lack of cooperation between the guarantors of the system (Chamber of Commerce except in Nigeria and Ghana).

However, the TRIE customs transit procedures has been subject to 2 specific bilateral approaches:

- One test and pilot implementation between Senegal and Mali
- One bilateral implementation between Burkina Faso and Ivory Coast

Both experiences are based on mutual and reciprocal understanding on the following issues:

- Increased connectivity amongst customs of both countries concerned and exchange of data
- Mutual acceptance of the TRIE declaration
- Bilateral mechanism for the sharing of the use of a single guarantee to cover the transit of goods through the two countries

Both bilateral experiences have proven to be efficient and beneficial and could motivate and justify a regional roll-out of the bilateral arrangements by:

- Reproducing recommended practices to facilitate bilateral implementation of the TRIE Convention based on the concrete and practical modalities of above mentioned experiences for the implementation of the TRIE
- Organize a set of recommendations in the aspects of customs cooperation and exchange of transit data, in particular, those aimed at fostering simplifications such as the electronic submission of TRIE transit declaration to the customs office of departure. The Customs office of departure once it verifies and approves, would transmit the approved declaration and data to the adjoining country involved in the transportation thus avoiding the duplication of declarations at each border. Countries using ASYCUDA world may have this aspect facilitated and automated.

2.3.3 Actions at national level

The implementation of regional or bilateral agreements relies on the actions that are undertaken at national levels to activate them.

It has already been shown above that actions by Governments and national administrations are key to ensuring implementation of regional and bilateral instruments.

RECs could assist their member States in this regard by undertaking activities such as:

- The drafting of training materials on the benefit and basic functioning of their key instruments
- Organization of regular training sessions for public and private sector stakeholders
- Assisting their Member States in the drafting of their internal rules and instructions to facilitate the harmonized implementation of the regional instruments, for example, through the dissemination of implementation guidelines and best practices.
2.3.4 Facilitate implementation through harmonized enforcement approach: definition of regional best practices for controls and enforcement

1. Findings

From a general point of view, if regional transport facilitation instruments do exist, their implementation is failing.

2. Recommendations to facilitate enforcement of the rules established by regional or bilateral instruments

The efforts to be undertaken to organize and harmonize the road transport market in Western and Central Africa should also be accompanied by a harmonized vision on the implementation of the rules, their controls and the sanctions to be applied in case of irregularity or infringement.

Indeed, harmonization of rules aims at fostering equal or at least balanced competition conditions. This directly implies that the common rules are implemented, controlled and sanctioned harmoniously throughout the Member States of the RECs concerned.

To achieve this goal that is key in the regional integration context, RECs could valuably be mandated to undertake with their Member States the following actions:

- Make a clear inventory of the key regional or bilateral conventions, agreements, directives, decisions regulations adopted in relation to the road transport sector
- Identify for each instrument, the control measures prescribed for
  - The vehicle
  - The driver
  - The goods
  - The documents (customs, traffic, immigration, foreign trade, veterinary, phytosanitary…)
  - Special requirements (dangerous goods, perishable foodstuff, oversized consignment)
- Identify for each instrument and for each element the Agency authorized at national level to undertake controls and eventually apply sanctions and penalties
- Identify the sanctions and penalties that can be applied in cases of irregularity or infringement

Such a coordinated analysis would then allow the drafting of implementing guidelines for:

- Defining control procedures at departure, en route, at borders and at destination
- Reinforce mutual recognition of controls through the definition of harmonized control reports
- Organizing the coordination of control authorities at national level and at bilateral and regional levels
- Recommending common levels of sanctions and penalties in areas where the analysis shows that they differ between member States
- Obliging the reporting at national and regional levels of the sanctions applied
• Mandating the supervision of the implementation of controls and sanctions by positioning observatories for monitoring of abnormal practices

• Adopting common sanctions and penalties for fighting against corruption of both public and private sector agents

3 Measures for liberalizing and financing the road transport industry

While liberalization of the inter States road transport market and financing of the road transport sector are often analyzed separately, due consideration should be given to the fact that both issues should be investigated within the general situation of the sector in the regions as already observed in Report One. There is consensus in as far as the description of the road transport situation is concerned in terms of its fragmentation, low performance, lack of professionalization of its players, and lack of profitability of the sector that is perceived as non-attractive for investors and risky for financial institutions and banks.

Therefore, the discussion on liberalization and financing of the road transport sector should not be based on a rigid application of concepts borrowed from developed countries but rather on the reality of the situation as observed. These concepts should instead be seen and applied within the context of creating the basis for the emergence of a true and efficient African road transport industry. They should not be imposed as an immediate objective in themselves but rather seen as instruments to be implemented on a step-by-step basis as part of measures undertaken to create and stabilize the sector in the medium to long term. Based on this understanding, special attention should be paid to the roots of the problem that needs to be addressed and solved. It should be recalled that the abrupt deregulation of the national transport markets without any accompanying and transitional measures to upgrade the sector and to stabilize it resulted in the situation being faced today in most of the Western and Central African countries.

Liberalization of the inter States road transport markets and the financing of the sector in particular as far as fleet renewal is concerned, should be viewed as being part of a dynamic strategy that would first create the conditions for the sector to develop and stabilize (resolve the blocking factors) and then pave the way for undertaking a step by step liberalization of the sector. The implementation of mechanisms for financing the renewal of the fleet would become a structuring component of the sectorial development policy.

Under such dynamics, the RECs and their Member States should address the following key obstacles:

• the disorganized and non-transparent access to freight by road carriers,
• the structure of the imposed transport tariff regime,
• the inefficient practices by traders involved in import or export of goods,
• the disruptive role of the Maritime industry in the fields of road transport markets

And then define a medium and long term approach towards:

• Liberalization of inter States transport markets through a revision of road transport bilateral agreements based on step by step adjustment of transport quotas towards their possible elimination in the medium to long term
• Definition of a comprehensive fleet renewal program with a corresponding financial structure.
However, these efforts should be considered within the overall context of structuring and organizing the profession at national level according to the recommendations proposed in the report on “Regional Harmonization of the regional road freight industry in terms of access to profession, standards, regulations control and enforcement”. Indeed, international experience demonstrates that the international road transport sector emanates from a structured national road transport industry.

3.1 Organize the freight road transport market to optimize its efficiency and competitiveness

While the report on “Regional Harmonization of the regional road freight industry in terms of access to profession, standards, regulations control and enforcement” aims at providing guidance for organizing, structuring and strengthening the road transport sector and connected professions, special attention should also be paid to the way the freight road transport market is organized and remedy the deficiencies that impact on its functioning.

The recommended actions aim at creating the conditions necessary to organizing national and inter States road transport markets and prepare and strengthen them for eventual step-by-step liberalization.

3.1.1 Adopt common definitions for transport for hire and reward and own account transport

1. Findings

At both national or inter State levels, it is observed that own account transport activities are developing and increasing to levels of up to 80% of the transported volumes to the detriment of the public transport. This is usually explained as resulting from the fact that public transport is unreliable while importers and exporters require reliable transport capacity to move their goods. As a result they have therefore acquired their own fleet of vehicles for transporting their goods.

2. RECs should propose a harmonized definition of own account transport to clarify and possibly quantify its position vis à vis public transport

Indeed, within the perspective of regional integration and step by step liberalization of the road transport sector, RECs should valuably propose a common definition of own account or private transport in order to distinguish it from public transport and more importantly ensure harmonization of the inter States road transport market access regulations.

This definition should be based on commonly accepted parameters as follows:

- Transportation of goods belonging to the company, or transportation of staff or personnel of the company
- By vehicles owned by the company or exclusively used by the company (rented vehicles without drivers)
- With drivers and crews employed by the company, and
- The transportation should be justified by the needs of the company and be auxiliary to its main activity

Such definition should be introduced in the ECOWAS Convention regulating inter States Transport from 1982 and in the ACTE No. 596 - UDEAC - 612 - CE – 31 regulating the Access to the profession of goods road transport operators.
Based on a common definition, and once the essential reforms have been engaged to restore better economic operating conditions for professional carriers, it should be recommended that Member States agree at RECs levels to determine for inter States transport, a quota that would limit own account transport and reserve a minimum share for public transport. For example, shippers and industrialists operating own account transport should reserve to public transport at least 20% of their freight (tonnage to be transported). Such a quota should continuously evolve until the step-by-step liberalization has been achieved.

This quota would be managed as per the same conditions as those applicable to the road transport for hire and reward and would be included in the Bilateral Transport Agreements.

3.1.2 Review the conditions of access to freight

1. Findings

It is observed that road carriers have been deprived at national and inter States levels from a direct commercial relation with their clients to the benefit of unregulated players that have monopolized the so called “freight distribution”. These intermediaries (Coxers) are acting without any legal framework or regulation, do not appear on the transport documents and assume no responsibility or liability as far as the transport and the goods are concerned.

Further to the general liberalization of the transport market and the abandoning of the so called “Freight offices” (Bureau de Fret) who were in charge of distributing the cargo, unregulated players started to act as transport intermediaries for the shippers and have progressively monopolized the freight distribution to the detriment of road carriers.

In addition, inter States transport freight commercialization is subject to the involvement of the hinterland countries’ “Shipper Councils” that issue transport documents (consignment notes) and of the corresponding syndicates of carriers for the selection of the carriers. Both are represented at the ports. However, all own account transporters are escaping from these procedures and the involvement of these numerous intermediaries.

Finally, the Maritime sector is playing a disruptive role in land transportation that additionally prejudices the professional road transport sector (see section below).

2. Recommendations of steps to be undertaken by the RECs to organize freight commercialization

The report on “Regional Harmonization of the regional road freight industry in terms of access to profession, standards, regulations control and enforcement” recommends the adoption of common rules to regulate the access to transport and logistics intermediaries’ professions. This step appears indispensable to allow the road transport market to operate according to clear and transparent access rules for all players within the transport and logistics chains.

However, such action should also be complemented by some initiatives to ensure better transparency of the road freight market that will then allow step by step liberalization.

In order to move from a freight distribution mechanism towards freight commercialization, key principles should be advocated by Member States at RECs levels for a harmonized approach on key issues such as:
• Prescribing the basic contractual obligations and liability rules that will ensure all intermediaries act at regional level in accordance with a harmonized legal framework and regulation.

• Requiring that the name of the intermediary should appear explicitly on the transport documents and consignment notes

• Requiring that payments for transport freight and intermediaries commission should be invoice based with a transparent audit trail (by way of checks or bank transfers)

• Adoption of a legal presumption to the effect that, when the name of the intermediary is not indicated on the consignment note, the shipper carries the full responsibility towards the carrier and control authorities in case of infringements of security and safety rules (over driving time, overloading…). This legal presumption would also entail in such a case that the shipper has the sole responsibility for all direct payments of the transport cost and related annex and auxiliary expenditures to the carrier.

• Encouraging long term direct contracts between shippers and road carriers (contract by global tonnage or based on time)

3.1.3 Secure transport operators positions to allow the sector to become profitable and competitive

1. Findings

The way the existing road transport market is functioning places the road transport carrier in a low and weak position as against the Coxers and the actual shippers. This is further aggravated by the lack of training and professional competence of most of the road transport operators in particular in the economic and legal aspects of the activity.

Therefore, in addition to the efforts to be undertaken to harmonize conditions for access to the profession and to increase the professional competence of road transport operators, some steps should also be undertaken to strengthen the sector’s position within its economic and legal environment.

2. Recommendations for a regional approach to strengthen the road transport operators position within its economic and legal environment

Despite the adoption on 22 March 2003 by the OHADA, (Organisation pour l’Harmonisation du Droit des Affaires en Afrique / Organisation for the Harmonization of Business Law in Africa) of the Uniform Act relating to the contract of carriage of goods by road, the legal status and liability conditions of road transport operators are not really known nor implemented.

The OHADA Uniform Act provides for harmonized contractual road carriers liability conditions. It prescribes the presumption of liability of the road carriers and also provides exceptions to the rule and the precise circumstances of their applicability. It also sets out limits of indemnity to the liability provisions and procedures to be followed in seeking remedial action.

It should be noted that the Uniform Act is silent on certain key aspects such as the transportation tariff, the modalities of payment, the annex and auxiliary services that could be rendered in the course of a road transportation transaction (storage, packaging, logistics services at large).

In practice, the informal character of the activity and the involvement of intermediaries negatively affect the impact and effectiveness of this important Act that aims at ensuring an equal liability regime
between all players thus contributing to equal competition conditions in particular for inter States transport.

As OHADA membership only counts 17 Western and Central African Countries, RECs from other regions may consider adopting similar rules so as to achieve a harmonized continental legal framework for road transportation of goods.

**In order to reinforce the position of the road carriers and restore equitable and transparent contractual relations with shippers, RECs must work out some framework rules and guidelines to help their Member States in implementing harmonized road transport contractual norms.**

**BOX: 12**

**RECs and Member States possible actions to strengthen road transport operator’s contractual position:**

**Develop some model or standard contracts**

Such model or standard contracts should valuably complement the OHADA Uniform Act by addressing some aspects that are not covered by the Act such as:

- Obliging the pre-quotation practice based on a precise description of the operation and services to be rendered (transport, annex and auxiliary services to be realized for the agreed price)
- The right of the carrier to invoice all services rendered that were not included in the initial quotation
- The definition of an acceptable “time franchise” defining the waiting times included in the transport price for loading, border crossing and unloading.
- Affirmation of the carrier’s right to invoice any overruns of the time franchise
- Direct right of the carrier to claim payment from the shipper when the intermediary is failing to pay

**Assist Member States and Monitor the implementation of the agreed principles by developing training instruments and capacity building tools**

These actions should aim at promoting and implementing the OHADA Uniform Act relating to the contract of carriage of goods by road by focusing in particular on the carrier’s liability conditions. It should also address the shippers’ obligations towards the carriers that are ignored in practice and that carriers are unable to impose.

**Some simple practical checklists should be developed to assist stakeholders during the conclusion of a transport contract. These should address:**

- The respective obligations of shippers and carriers before departure, en route and at destination
- Filing in the transport document
- Actions in case of incident or accident en route
- Processing at arrival
- Procedures and timelines to adhere to in case of loss, damage or delay
- Calculation of indemnity

**RECs should develop training and capacity building tools to help operators to:**

- Analyse a transport demand and draw a quotation based on actual operational cost
- Monitor their invoicing and actual payments
Optimize their insurance coverage to protect simultaneously their position and activity as well as their clients’ interests and use this aspect as a competitive advantage

3.1.4 Create optimal operating conditions for better profitability of the road transport sector

1. Findings

In addition to all obstacles resulting from the disorganization of the road transport sector, road transport operators are faced with multiple operational difficulties that further affect their profitability and appetite for developing and involvement in inter States transportation.

2. Recommendations to restore optimal operating conditions for regional road transport

In order to develop inter States transport and trade, efforts should be undertaken by the Member States under the umbrella of their respective RECs to improve road transport operating conditions which jeopardize the emergence of a real road transport industry as they currently impede the provision of optimal transport services at the best price.

All recommendations and measures described above should be supplemented by actions aimed at restoring favorable operating conditions otherwise efforts would be in vain.

Indeed, Member States must consider actions to be undertaken at RECs levels aimed at improving operating conditions by addressing issues relating to the high and outrageously unjustified operating costs which result in particularly low profitability of the road transport sector, which in turn fails to attract potential investors and funding from banks and financial institutions as they consider the road transport to be a high risk sector. The lack of investment and funding jeopardizes the sector’s capacity for renewing its fleet of vehicles and reduce operating costs. In turn, the over-aged fleet incurs higher operational costs and poor service delivery and performance. This in turn further reduces the profitability of operations and further minimizes any chances of access to potential investment or credit and financing facilities. Such becomes a continuous vicious cycle.

Therefore, RECs Member States must develop a common vision aimed at breaking the roots of this cycle through attempts to improve operating conditions.

In particular, the following priority issues must be addressed by Member States at RECs levels.

i. RECs Member States to develop a common vision to encourage individual road transport operators to formalize themselves through economic groupings or cooperatives to maximize activity and rationalize operating costs

This approach would help in addressing the current situation of unbalanced traffic at both domestic and regional levels which is resulting in a huge number of empty trips. Rationalization of operations would lead to a rational use of the available means and reduce empty trips while contributing to better profitability.

In this regard, the OHADA revised unified rules adopted on 30 January 2014 in Ouagadougou relating to commercial entities should be fostered and used to motivate individual operators to formalize their activities through innovative cooperative structures and economic groupings.
ii. **RECs and Member States to monitor corridor performance as far as illegal controls and payments are concerned.**

Experience shows that previous observatories set up to monitor illegal practices were effective in exposing the negative consequences of these practices on regional trade and transport. It would be beneficial if these experiences are revived as proof of existence of strong political will to create an acceptable regional trade and transport environment.

iii. **RECs Member States to facilitate harmonized simplification of the proliferation of dry ports: Concentrate efforts on simplification rather than on creating new obstacles**

Addressing the real causes of delays and high transportation costs would result in time savings on the Abidjan - Ouagadougou corridor from the current trip duration of between 21, 5 to 25 days to a trip duration of between 2 to 3 days which is considered reasonable and practically attainable.

This demonstrates that the usual argument citing the high road transport costs as the causal factor is not grounded in fact. The overall logistics costs are massively increased and a direct consequence of the various procedures and documentation requirements than by the transport costs themselves, which are insufficient in the current operating conditions to generate profitability.

Therefore, RECs and their Member States should undertake harmonized actions to efficiently address and resolve the real causes of the high logistics costs and of the low profitability of inter States transport.

By reducing the vehicle turnaround time on a trip, road transport operators will optimize their fleet utilization and profitability even without overloading and being fully compliant with the regulatory framework.

Working on simplification of procedures and documents does not involve high investment or costs but rather political will and capacity building efforts.

Incidentally, it appears fashionable to promote the proliferation of dry ports which are often located in the northern part of coastal States under the pretext of facilitating the intermediate storage of goods nearby their final destination to be easily picked up for final delivery.

RECs need to undertake an assessment of such initiatives in terms of efficiency, reduction of logistics costs and emergence of inter States reliable transport systems versus the simplification of procedures and practices that would simply have an immediate effect on the accessibility of goods to their consumption markets.

Indeed, such an analysis should aim at demonstrating the usefulness of setting intermediate storage sites, which entails:

- Storage costs
- Increased risks due to multiple handling of goods and breaking loads
- Cost of customs guarantees
- Insurance for the goods under storage

This should be compared to simplification of procedures and documentation as demonstrated above that would need no investment and bring immediate savings.
In addition, the proliferation of dry ports will impede the development of inter States transport or further aggravate its situation in particular when dry ports are located near by a land border. In such cases, the transport leg between the port and the dry port will be considered as being domestic transport, implying that foreign transport operators will not be allowed to undertake such transportation as cabotage is prohibited. Only the transport leg from the dry port to destination would be international, but it is self-evident that only carriers from the destination country are likely to be interested in such operations.

The dry port concept is only suitable and justifiable for certain types of commodities when coupled with special customs treatment and fiscal privileges as normally associated with the concept of Free Zones.

Real efforts should be therefore be prioritized on the simplification and harmonization of procedures and documentation where drastic cost cutting can occur rather than simply relocating bottlenecks from ports to the dry ports which invariably increases the logistics costs.

iv. **RECs and Member States to concentrate efforts to harmonize smooth border crossing operations by resolving operational difficulties emanating from inappropriate procedures and requirements resulting in long waiting times at various stages of a transportation trip**

Unfortunately, it should be noted that the ongoing interventions undertaken at national and regional levels within the framework of the implementation of the WTO Agreement on Trade Facilitation are mostly concentrating on trade and customs issues while transport and logistics problematic issues are often left aside.

However, these trade and customs aspects have a direct and clear impact on the transport operational conditions.

RECs and their Member States should undertake trade facilitation interventions that include road transport services as it is the component within the logistics chain that is fraught with operational difficulties.

**RECs and their Member states must undertake simplification and harmonization of procedures and documents in order to facilitate speedier controls at the borders.**

**BOX: 13**

**Key steps to simplify and harmonize requirements, procedures and documents**

**RECs to compile in consultation with their respective Member States an inventory that identifies at national level and for each country:**
- The foreign trade procedures prescribed for inter States trade and transit
- The documents to be obtained and identify the ones to be presented at departure, borders or destination to in the course of an inter State Road transportation
- For each document required, identify the organization in charge of delivering it and the related costs
- Map the data appearing on each document and their origin and holders to identify possible interactions and avoid duplication of submission

The results of these national inventories should be consolidated at RECs level for purposes of deriving possible synergies and harmonization of the processes for issuing such documents with a view to fostering mutual recognition from the point of departure up to final destination.
The ultimate objective is the minimization of border procedures that delay transport, require the duplication of documents to be submitted at borders by brokers and add to costs of transportation. These efforts should in particular target the simplification and harmonization of:
- Foreign trade procedures
- Customs procedures export, import and transit
- Transport procedures and documents

v. **RECs and Member States to initiate the use of regional customs transit procedures through the development of bilateral customs cooperation**

See report on “Regional Harmonization of regional road freight industry in terms of access to profession, standards regulations control and enforcement”

vi. **RECs and Member States to introduce a regional road transport consignment note**

The ECOWAS Convention related to inter States Road transport of goods of 1982 provides that goods transported must be accompanied by a transport document, a consignment note (letter de voiture) which should help in identifying the goods, the shippers and the consignees. CEMAC also obliges the use of an international road transport consignment note. Both RECs leave the origination and issuance of the consignment notes to the shippers’ organizations but have not harmonized these nor oblige mutual recognition of the same. In practice however, each country has developed its own national and international consignment notes.

BOX: 14

**Clarify the confusion between the Transport Contract and the Consignment Note**

More often than not, including in the road transport literature, the transport contract is confused and mistaken with the Consignment Note.

This confusion is both legally and practically erroneous.

The **Road Transport Contract is defined by its consensual character**, meaning that the contract is concluded as soon as the parties have reached an agreement. The Road transport contract is not formal, it is not written and it does not require a written document to be concluded.

The **Consignment Note is not the contract** but an accompanying document that reproduces some of the contractual information (description of goods, loading and offloading places, instructions…). Its main function is to track the transport from departure to delivery and to record the various transportation phases and the state of the goods remitted and delivered.

International road transport laws (UN CMR Convention or OHADA Uniform Act) clearly state that the absence of consignment notes has no bearing on the existence of the contract of transportation nor on its validity.

This requires two levels of actions:

- **Mandate the OHADA Uniform Act on the contract of carriage of goods by road as a harmonized tool that ensures fair competition and equity between the players**
- **Harmonize, based on national and bilateral experiences, the Consignment Note to facilitate inter States transport**

For inter States transport, operators are confronted with the need to handle one consignment note for each country involved in a given transportation due to the lack of a standard model and mutual recognition.

RECs Member States must therefore adopt guidelines aimed at:
• Prescribing the use of a single inter States consignment note which is standardized
• Acceptance of an electronic consignment note
• Fostering an agreement between the shippers councils with respect to the mutual issuance of the standardized forms and their sharing of the generated revenues
• Fostering mutual recognition of the inter States consignment note that is generated and issued at departure and recognized throughout the transportation journey by all countries and authorities involved up to final destination.

By addressing these identified sources of inefficiencies and delays and of unjustified costs, inter States transport operations would be facilitated and their costs rationalized.

**BOX: 15**

*Example of harmonization of Consignment Note at national and bilateral level*

Ivory Coast has adopted the principle of a unified Consignment Note, the “Unique Transport Document” (Document Unique de Transport DUT) to replace the old national consignment notes (feuille de route, lettre de voiture).

Burkina Faso has adopted as Consignment note the BSTR (Bordereau de Suivi du Trafic Routier) for its domestic traffic.

It meant that operators involved in bilateral traffic between the 2 countries had to create a Consignment Note for each national segment of their transport.

With a view to simplifying border procedures, for the purpose of their bilateral transport, both countries agreed that the BSTR and the DUT should be mutually recognized. This mutual recognition allows operators to use for the entire journey the Consignment Note that was issued at the start of the inter States movement (BSTR or DUT) and thus avoiding the issuance at borders of a national consignment note.

Such approach could be used as a Best Practice to be duplicated at bilateral if not at regional levels under the auspices of the RECs.

3.1.5 Review the domination of the maritime sector in the organisation of the road transport sector

1. Findings

As far as it relates to inter States trade and transport between coastal and hinterland countries, the control of the maritime sector in the organization of land transport continues to increase to an almost dominant position over the organization and functioning of inland transport.

2. Recommendations to restrict the Maritime industry’s involvement in road transport activities and favor containerized transport

In order to restore normal competition conditions, as it is the case in Europe or in America, RECs and their Member States should seek for common guidelines to be implemented to ensure that Maritime companies, shipping agents, stevedoring operators and port authorities:

- Cannot undertake any road transport operation unless they create a separate legal entity subject to public transport access rules (local company, established in one member State of the concerned REC, registered as public road transport operator meeting all the conditions for access – professional competence, integrity, financial capacity and acting professionally as a road carrier)
- Cannot act as freight forwarder or broker unless they create a separate legal entity subject to transport and logistics intermediaries access rules (local company, established in one member State of the concerned REC, registered as public road transport operator meeting all the
conditions for access – professional competence, integrity, financial capacity and acting professionally as transport and logistics intermediary)

- Cannot resort to informal intermediaries (Coxers) for organizing road legs of a door to door transportation

**Furthermore, efforts should also be undertaken to encourage door to door containerized transport through the adoption of some common position for purposes of negotiations with the maritime industry.**

<table>
<thead>
<tr>
<th>BOX: 16</th>
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<tr>
<td><strong>Key elements to be negotiated with maritime companies to encourage door to door containerized transport:</strong></td>
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<tr>
<td>Adopt harmonized and longer franchise period granted by shipping companies for the return of containers to the port up to 30 days</td>
</tr>
<tr>
<td>Reduce penalties being charged for late return of containers</td>
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<tr>
<td>Implement an affordable guarantee mechanism with an effective release of the guarantee upon return of the container</td>
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An agreement on these three main issues would lead to an increased share of the door-to-door containerized movement thanks to more realistic and affordable pricing conditions that would allow the operators not to offload and go through intermediate storage at the port but rather facilitate immediate delivery at destination. However, this can only occur if road transport operating conditions are improved to speed up delivery time and ensure on time return of empty containers.

### 3.1.6 Review the shippers practices

#### 1. Findings

When examining the timelines for importation of goods into hinterland countries, it would appear that a number of delays are occurring at various stages of the operations because of the unpreparedness of the shippers to ensure smooth and immediate transportation of their goods from the moment the ships arrive at a port.

In reality, this finding results from various causes:

- Lack of anticipation and unpreparedness with respect to documentation and formalities
- Lack of funds to pay for the transit guarantees, the customs duties and the transport fees
- Inappropriate use of Incoterms

Furthermore, overloading practices are also resulting to a great extent from the shipper’s practices.

#### 2. Recommended actions by the RECs to professionalize shippers and optimize their transport policies

##### i. RECs’ actions to professionalize shippers and modernize their practices

In the framework of the ongoing activities being undertaken to prepare for the implementation of the WTO Agreement on Trade Facilitation, it is anticipated that these will result in the modernization and upgrade of international trade and customs procedures and rules. RECs and their member States are involved in such actions.
It would be beneficial to undertake capacity-building programs for the shippers and traders in order to highlight the prejudice they suffer from the current practices.

**BOX: 17**

**Prejudice suffered by shippers mainly from landlocked countries from the current practices**

**Direct costs incurred due to lack of forward planning include:**
- Penalties to the port for exceeding authorized stay in port areas
- Vehicles having to wait long periods in the neighborhood of the port
- Offloading of containers
- Intermediate storage
- Reloading

**Financial consequences resulting from the prolonged time for delivery pending the selling of the goods and thus delaying cash income**
- Risks of theft or depreciation emanating from multiple handling procedures and storage

As far as the organization of the road transport legs are concerned, and according to the established practice, 50% of the agreed transport cost is paid by the shipper (or his representative) at departure and 50% after delivery. However, it is observed that the payment at departure is delayed on average by 4 to 5 days, meaning that the loaded truck is forced to wait in unsecured places for the payment thus exposing the goods to risks of theft or damage. In addition, this practice leads to customs penalties for non-compliance with transit deadlines adding up to the global transport costs incurred.

RECs must valuably develop training tools in this regard to create awareness on the negative consequences of these practices for the shippers themselves.

**ii. RECs and Member States to encourage the use of appropriate incoterms to control post or pre-maritime transport**

It appears that African importers over the past decades have progressively changed their practices to increasingly use Incoterms mandate the sellers of the goods the provision of transportation up to final destination. In turn, sellers, mainly from Europe, have increasingly externalized their logistics services and often rely on intermediaries or maritime companies to organize all the transportation requirements.

Such practices, have progressively led to domination by the maritime industry of the provision of land transport in Africa.

RECs and their Member States should advocate and lobby importers and traders to review their practices in order to be in a position, when the road transport sector has been improved, to take over the control of their logistics activities in order not to depend for their inland transport on foreign logistics companies but to benefit from improved services of the local carriers.

**iii. RECs and Member States to adopt clear rules that penalize shippers for overloading and non-compliance with safety, security and other requirements**

Overloading practices are rampant in Western and Central Africa and all attempts to implement the adopted rules to stamp out the overloading practices have failed, almost everywhere.
However, beyond this situation, it should be noted that the regulations in force are mainly penalizing the road carrier in case of overloading when, in fact, a careful analysis would show that the carrier is not the beneficiary of the overloading but the shipper who tends to benefit in the short term and lose out in the long term.

RECs and their Member States should valuably review their vision and policy in this area based on the following concrete considerations:

- Road transport tariffs expressed in Tons/Km are directly leading to overloading as carriers believe that the more they load the more they will earn as the margin is very low
- Road carriers are not in a position to control the weight of the vehicle before it departs
- Shippers are directly benefiting from the practice as a result of the Tons/Km tariffs and the amalgamation of shipments

Following experiences in other continents and especially in Europe, RECs Member States should adopt the harmonized principle of penalizing the shipper whose name appears on the consignment notes in case of overloading in addition to the sanctions imposed on the carriers. Indeed, experience shows that as soon as shippers are penalized, the practices change and loading rules (total and per axel) are strictly adhered to.

RECs executive bodies should draft a model provision for introduction of this principle at national levels through appropriate legal instruments such as a decree, for example. The amount of the fine should be substantial and much higher than the actual benefits enjoyed from overloading.

This effort should also be accompanied by actions to review the road transport tariff structures and conditions.

3.1.7 Review transport tariffs based on operations (time and distance) and not Tons/Km

1. Findings

Road transport tariffs are not determined by carriers but are “dictated” by shippers and intermediaries and are not transparent. Shippers are using intermediaries and paying a global amount that is composed of intermediary commission (up to 50% of the amount), and transportation costs as such which include freight, traveling expenses and payments to be made en route, to which are added customs payments (guarantees for TRIE, for example).

2. Recommendations to reaffirm key economic principles for setting competitive transport tariffs ensuring profitability for road carriers

RECs should play a leading role with regards to illustrating to their member States the importance, for their economic and trade development, of ensuring that logistics and transport costs are effectively based on actual value added and contributing to efficient and sustainable transport services.

RECs must advocate that sustainable transport services are dependent on two complementary factors, namely, reasonable profitability of the road transport operations and drastic improvement of the operating conditions.
Drawing up guidelines addressing the profitability of road transport companies to be incorporated into national legislation

Adopt the legal principle that transport tariffs must allow the transport operator to cover its fixed and variable costs and enjoy a reasonable commercial margin as was introduced in the Ivory Coast Law for inland transport.

The costs to be covered in the least include:

- Driver and operations staff (salary and charges)
- Vehicle depreciation and maintenance
- Fuel, oil and lubricants
- Road charges, insurance and taxes
- Commercial structure costs (administrative staff, contract and other legal fees, and related fiscal fees…)

In addition comes the commercial margin

Any transport tariff that does not cover these minimum conditions and charges would attract penalties on the shippers

Forbid the use of tariffs expressed in Tons/km

Develop regulations providing for the right of road carriers to invoice for any additional service rendered that were not foreseen nor included in the agreed tariff

Clearly prohibit the automatic compensation of damage or losses on the payment of transport freight and promote the OHADA rules in that respect

Prescribe maximum credit period within which payments are to be made (for example, 30 days after delivery) and provide for automatic accrual of interest calculated at the prescribed rate if the deadline is not complied with

Include clauses catering for automatic adjustment of the transport tariffs price in the event of sudden increases of costs due to external circumstances (for example, fuel, insurance…)

The development of these recommendations would provide the transport industry with tools allowing operators to gradually entrench their roles Vis-à-Vis shippers and intermediaries and increase the profitability of the sector.

Indeed, it is essential to restore profitability of the sector before addressing other aspects such as fleet renewal that make little sense when companies are not in a position to afford any loan even at subsidized interest rates.

3.2 Step by step liberalization and modernization of the bilateral road transport agreements

The liberalization of the inter States transport market should be seen as a long-term goal that will be beneficial to the economy when and only when the road transport industry is modernized and the road transport market is organized based on a clear and transparent legal framework.

1. Findings

ECOWAS and CEMAC have developed legal instruments to organize international transport between their respective member States.

Inter States transport in the ECOWAS region is regulated by the Convention A/P.4/5/82 relating to inter-State road transport of goods signed in Cotonou on 29 May 1982 and the Additional Act
A/SA.17/02/12 relating to the harmonization of standards and control procedures for size, weight and axel loads of heavy vehicles transporting goods.

In CEMAC region, ACTE No. 596 - UDEAC - 612 - CE – 31 regulates the Access to the profession of goods road transport operators (Portant réglementation des conditions d’exercice de la Profession de Transporteur Routier Inter-Etats de Marchandises Diverses).

However, both RECs’ instruments leave many aspects to the discretion and bilateral arrangements between their member States.

In that context, in the ECOWAS region, most member States have signed bilateral transport agreements between themselves, which agreements in particular prescribe a regime of quotas of authorizations.

In Western Africa, quotas are uniform and are based on the following principles:

- For movement of goods transiting by a port, 2/3 of the bilateral public road transport is reserved for hinterland landlocked countries operators and 1/3 for the coastal States
- For bilateral transport of goods originating locally, bilateral public road transport should be handled on the basis of a 50% quota for transporters of each country

In the CEMAC region, quotas are also prescribed but they vary from country to country according to the signed bilateral agreements. For example for the Corridor Douala - Ndjamena and Douala - Bangui quotas are set as follows:

- Cameroun and Chad : 60% quota reserved for Chad operators and 40% for Cameroun carriers
- Cameroun and Central African Republic : 65% Quota for Central African Republic operators and 35% for Cameroun

In addition, some hinterland landlocked countries have imposed further restrictions for the transportation of certain “Strategic Goods” for which transport is strictly restricted to national operators.

In practice, many difficulties have emerged in implementing the quota systems which are not really complied with. However, stakeholders seem to derive comfort from the fact that at least the quotas exist and provide some framework on what should happen and argue that their elimination would only cause further inequities between the players.

2. Actions by the RECs to attain a step by step liberalization of inter States transport markets

A step-by-step liberalization of the inter States road transport market should result from the definition and implementation of a clear action plan to be developed by the RECs and their Member States.

BOX: 19

Action plan for a step by step liberalization of the inter States Road transport market

RECs and Member States should use the following approach:

Make a comprehensive inventory of the situation: Make an inventory of all road transport bilateral agreements signed between the RECs’ respective member States currently in force and build a Matrix to:

- Compare their provisions
- Identify the provisions that have become obsolete
Identify the provisions that contradict other regional instruments

Identify areas where provisions are lacking

Examine, in the framework of each bilateral relation, the functioning and the implementation of the agreement and the volume transported and by which operators

Examine and compare the lists of so-called “Strategic goods” and the volume they effectively represent

This inventory will reveal a clear picture of the current legal framework and its implementation and will help moving to the second step.

**Craft a Regional model of a bilateral transport agreement that should be used by Member States in their efforts to modernize their existing agreements.**

Such model must address amongst others the following issues:

Introduction of Harmonised conditions for accessing the inter States transport market based on common definitions used for being allowed to become at national level a road transport operator (professional competence, integrity financial capacity, establishment in a REC member State)

Issuance of inter States transport authorizations to transport companies on the basis of a recommendation letter from their National Road Transport Federation

Introduce a realistic and practical framework for systematic publication of available freight for transportation with an indication of whether it will use public or own account transport

Introduce a common definition of own account transport and prescribe that each trader utilizing own account transport must systematically avail for carriage by the public transport sector a given percentage (20% to start with, for example)

Align the existing quota mechanism to the actual situation on the ground (flow of traffic, fleet capacity) and review it on a yearly basis with the overall objective of attaining a liberalized market environment in which conditions allow for fair competition and cost effectiveness of transport services

Review the list of Strategic goods to be transported only by nationals with the aim to progressively reintroduce these goods to the normal inter States transport market

Introduce a mechanism to monitor the use of inter States transport authorizations in the bilateral context and create an appropriate information sharing platform that informs of any suspension or revocation of such authorizations (for instance, the ECOWAS 1982 Convention provides for suspension or revocation of authorizations but does not prescribe any mechanism for effecting such decisions or for informing the member States concerned)

Introduce regulations for environmental protection from transportation activities that are practical and enforceable.

Introduce a regulatory framework for access to the profession and market of transport intermediaries based on similar criteria as applicable to road carriers intended to restrict the market to formal operators only.

Introduce the principle of direct liability of the shippers in case of overloading and prescribe standard sanctions and penalties

**RECs to assist their Member States in bilateral negotiations aimed at the harmonization of operational conditions which would contribute, through bilateral agreements, towards regional integration.**

Such an approach will pave the way for progressive liberalization of the bilateral and inter States transport markets while simultaneously improving the legal and operational market conditions for road transport operators to increase their capacity to deliver better service and attain improved and sustainable profitability.
3.3 Develop a comprehensive approach for financing and renewing the fleet of commercial vehicles

1. Findings

Many fleet renewal and financing programs have failed because they were defined as objectives in themselves and not contextualized to the fact that most road transport operators did not have capacity to access and repay the loan facilities despite the favorable loan conditions and preferential interest rates.

Therefore, whilst fleet renewal programs are of tremendous importance, they should not be an objective in themselves but should be seen as one important element within the overall strategy to create conditions for the resurgence of the road transport sector. The programs should emerge from improved operating conditions and profitability as an incentive for capacity to provide quality services and improved profitability.

2. RECs and Member States to agree on a framework for comprehensive fleet financing and fleet renewal programs

Indeed, RECs and their Member States must develop a common vision for fleet financing and fleet renewal programs and obtain the requisite financial and technical assistance for its implementation.

However, it should be kept in mind that this important component of the overall policy is only one element that comes within the overall policy aimed at ensuring the emergence of a profitable and sustainable road transport sector.

In crafting a framework for fleet renewal programs, RECs and their Member States must consider the following essential components that are all interlinked and should be regarded as a package and not as a list of issues to be selected from.

i. Create a public/private program management unit

Embarking on a fleet financing or a fleet renewal program requires the creation of a dedicated entity comprising public and private sector stakeholders in order to ensure that the program to be defined will take into account the needs and resource capacities of the key stakeholders.

Such a management unit should be placed under the leadership of the Ministry of Transport and should be composed of at least the following institutions and organisations

- Ministry of Finance
- Representatives of the National Road Transport Federation
- Representatives of the banking industry
- Representatives of the vehicles trading sector

RECs should develop the Terms of Reference for such management units to ensure harmonization at regional level through national implementation. The management unit should be in charge of the following tasks and functions:

- Define the program
- Negotiate and agree on the financial conditions of the program
• Review applicants files and validate
• Monitor its implementation
• Report to Minister of Transport and all key stakeholders

ii. Define the scope and objectives of the fleet financing and fleet renewal programs

Certain countries may need to assist the road transport sector to expand its capacity and operations and therefore require acquisition of new vehicles (Trucks, trailers, buses and coaches, taxis) while other countries may need to renew their commercial vehicle fleet which may be out dated.

It is therefore essential that the initial objective is clearly defined as it will determine the strategic choices to be made in defining the program itself.

iii. Define the eligibility criteria for operators

Fleet financing and fleet renewal programs should be defined as one of the tools to be used to modernize the road transport sector. As such, and depending on the peculiarities of each country and their special needs, special attention should be paid to:

• Defining the type of activity eligible to the programs
  If the objective is to promote the emergence of public transport, then the fleet renewal program is to be restricted to public transport operators, meaning that own account transport operators should be excluded from the program.

  It should also define the type of transport targeted being either goods and / or passengers

• Defining the type of operator eligible to the programs
  If the program is to be opened for road transport operators, it may be prudent to restrict access to the programs to those operators who will have satisfied the criteria for access to the profession of road transport operators as previously discussed above. Such an approach would not only serve to encourage individual operators to formalize their operations but also compel eligible operators to put in place requisite bookkeeping and fiscal systems as may be required for monitoring the programs.

iv. Definition of the type of vehicles eligible

Whilst this is an essential aspect, it should however be clear that this criterion should only be defined in the context of the age of the vehicle and activity undertaken.

The program should in no way prescribe to eligible operators a type of vehicle to be purchased nor the commercial vehicle traders to purchase from.

However, the eligibility of vehicles to be considered under the programs should be selected based on the number of vehicles to be replaced and of the financial resources available for the programs. In this regard, detailed statistics of the existing vehicle fleet should be compiled and used as a guide in the definition of the parameters of the programs.

In addition, and in the context of a fleet renewal program, vehicle eligibility is twofold in that it concerns the eligibility of the vehicle to be replaced (old vehicle) and the eligibility of the vehicle to be purchased and financed (new or used).
• Eligibility of the vehicle to be replaced

RECs must develop an evaluative approach in defining the criteria to apply to the vehicles to be replaced under a fleet renewal program, as the specific requirements of each country need to be taken into account.

In any case, it should aim at defining the age limits of the vehicles to be replaced for eligibility on to the programs. It should be defined by reference to the average age of the commercial fleet and should set an age range to be taken into account.

For example, it could be decided initially that eligible trucks to be renewed should be over 15 years old and below 20 years for motor vehicles. This would help in prioritizing the renewal of the oldest trucks and the age range may then be revised downwards in accordance with the progress being made.

• Eligibility of the vehicle to be purchased and financed

The decision to limit the program to the financing of only new vehicles or to also allow used vehicles to be purchased is to be made based on the real needs and on the capacity of the sector to meet its obligations under the programs (capacity to repay loans). The competence of the drivers and maintenance staff should also be taken into account as it would be counter-productive, for example, to restrict the programs to new vehicles only if the drivers are not also undertaking appropriate training to use them optimally and maintenance capacity is not up to standard.

In most countries, it would be prudent to allow new and used vehicles to be eligible for the programs. However, for used vehicles, a maximum age should be defined (for example 5 years) and it should be required that they carry specified and appropriate technical guarantees and warranties from the importer or manufacturer.

v. Create fiscal incentives

Most countries in both regions are importing commercial vehicles as they have no local vehicle manufacturers available.

In order to create a competitive environment and an incentive for road transport operators to invest within the framework of fleet financing or fleet renewal programs, some direct incentives should be granted such as:

• Exemption or reduced rate of import taxes and duties for the vehicles eligible under the programs (new and or used under a certain age)

• Exemption or reduced rate of VAT

Both exemptions should also apply to spare parts imported for their maintenance.

However, these fiscal incentives should prescribe conditions to avoid abuses of the programs such as:

• The vehicles procured under the programs should be owned and used by the beneficiary for at least 5 years, for example, before they can be resold or leased out

• If the vehicle is sold or leased out before the expiry of the prescribed period, fiscal exemptions obtained at the time of importation should be reimbursed by the beneficiary
where applicable (fleet renewal and not expansion), the old vehicle eligible for replacement should be effectively destroyed

**vi. Fleet Renewal implies destruction of old vehicles and eventually a scrapping incentive**

As a fleet renewal program aims at eliminating outdated vehicles from use and traffic, hence the destruction of old eligible trucks is an essential and indispensable element of the programs.

This requires the consideration of the following issues:

- Design of a proper mechanism by which it is ensured that when a beneficiary of the renewal program purchases an eligible vehicle, the old vehicle he is replacing is ceded to the authority managing the program which in turn will ensure its exit from circulation and traffic by breaking it up for usable parts and destroying the remainder.

This calls for implementation of a transparent mechanism and good governance practices for the program

- Provision of possible financial benefits through “a scrapping incentive”

  The scrapping incentive may take the form of a sum that is paid to the beneficiary, but this may be costly for the budget.

  It may also take the form of a contribution to the financing of the vehicle (new or used) that is purchased. In that case, it can be incorporated in the personal contribution to the loan granted to the beneficiary, or it can be used as a part of the loan guarantee.

**vii. Create facilitated financing conditions**

It has been demonstrated that access to credit and financing has become almost impossible for the majority of the road transport operators.

Therefore, a fleet financing or fleet renewal program’s first objective is to facilitate access to credit through various possible means that should be defined separately or combined and could be summarized as follows:

- Negotiation with banks for loans with preferential interest rates

  As the program will be managed in a transparent manner with the participation of all stakeholders, Banks and financial institutions should grant to beneficiaries’ preferential loan rates that would be affordable to operators but profitable as well for sustainability of the programs.

- Establish a guarantee mechanism

  It has been observed that Banks are reluctant to grant loans to operators and are asking for counter guarantees that may be expensive including personal guarantees from company owners or shareholders. It should be noted that the financed vehicles are not considered at this stage by banks as acceptable collateral securities. Since the sector is not profitable, banks are hesitant to accept the financed vehicles as collateral security as they would not be in a position to optimally dispose of the same and recover their exposures under current market conditions.
To address this dilemma, the State should consider providing its sovereign guarantee to banks for the loans granted under the programs. In the case of fleet renewal programs, the scrapping incentive may be used to create a guarantee fund instead of it being paid to the beneficiary.

- Grant longer repayment periods for the loans

The observed practices indicate that the usual loan tenure is limited to 3 years which is unanimously considered as too short and creates an unsustainable financial obligation on the beneficiaries that impacts on their overall business performance.

With respect to the programs, loan tenures should be brought to 5 years to allow beneficiaries to cushion the financial impact of the loan repayments.

**viii. Oblige training programs for drivers and maintenance staff**

In particular, in the context of financing new trucks, the training component is essential for drivers and maintenance staff.

RECs should recommend obligatory training for drivers and maintenance staff in this regard and the private sector (carriers, vehicle traders and training centers) should draw up some key modules that would then be implemented at national levels such as:

- Eco driving
- Basic use of new technology used in new vehicles
- First line vehicle service and maintenance
# Module 16 ROAD TRANSPORT SERVICES IN WEST & CENTRAL AFRICA AND IN EAST & SOUTHERN AFRICA

Module 16. 2 Road Transport Services in East & Southern Africa

By Crynos Mutendera

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbreviations and Acronyms</td>
<td>3</td>
</tr>
<tr>
<td>1 Cross-Border Road Freight Transport Industry</td>
<td>4</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>4</td>
</tr>
<tr>
<td>1.2 Overview</td>
<td>4</td>
</tr>
<tr>
<td>1.2.1 East African Community (EAC)</td>
<td>5</td>
</tr>
<tr>
<td>1.2.2 Southern African Development Community (SADC)</td>
<td>5</td>
</tr>
<tr>
<td>1.2.3 Common Market for Eastern and Southern Africa</td>
<td>6</td>
</tr>
<tr>
<td>1.3 Road Transport vs other Transport Modes</td>
<td>8</td>
</tr>
<tr>
<td>2 The Road Transport Industry and Regional Policy</td>
<td>8</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Organisation of the Industry</td>
<td>9</td>
</tr>
<tr>
<td>2.3 Conditions for Access</td>
<td>9</td>
</tr>
<tr>
<td>2.4 Regional Enforcement of Rules</td>
<td>10</td>
</tr>
<tr>
<td>2.5 Enforcement of Regional Rules at Country Level</td>
<td>10</td>
</tr>
<tr>
<td>3 Liberalisation of the Road Freight Industry</td>
<td>10</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>10</td>
</tr>
<tr>
<td>3.2 Efficiency and Competitiveness of the Industry</td>
<td>10</td>
</tr>
<tr>
<td>3.3 Conditions for Access to Freight</td>
<td>11</td>
</tr>
<tr>
<td>3.4 The Role of Industry Bodies</td>
<td>11</td>
</tr>
<tr>
<td>3.5 Liberalisation of the Road Transport Sector</td>
<td>12</td>
</tr>
<tr>
<td>3.6 Stages of Liberalisation</td>
<td>12</td>
</tr>
<tr>
<td>4 Relation of the Industry with Maritime Sector</td>
<td>15</td>
</tr>
<tr>
<td>5 Road Freight Industry Financing Systems</td>
<td>16</td>
</tr>
<tr>
<td>6 Industry Best Practice</td>
<td>16</td>
</tr>
<tr>
<td>7 Improvement Recommendations</td>
<td>17</td>
</tr>
<tr>
<td>8 References</td>
<td>19</td>
</tr>
<tr>
<td>9 Annex 1</td>
<td>20</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Regional instruments that facilitate inter-states transport

List of Tables

Table 2: Regional road transport facilitation programmes

Table 3: Schedule of professional drivers certification categories. (MCBRTA Report, 2015)

Table 4: Stages of increasing liberalisation of the regional transport sector
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMESA</td>
<td>Common Market for East and Southern Africa</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>DUI</td>
<td>Drinking under the Influence</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>ESA</td>
<td>Eastern and Southern African</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
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<td>Gross National Product</td>
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<td>Gross Vehicle Mass</td>
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<td>HP</td>
<td>Hire Purchase</td>
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<tr>
<td>MCBRTA</td>
<td>Multilateral Cross-Border Road Transport Agreement</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-Operation and Development</td>
</tr>
<tr>
<td>PrDP</td>
<td>Professional Driving Permit</td>
</tr>
<tr>
<td>RCP</td>
<td>Responsible Competent Person</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Economic Communities</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SUMATRA</td>
<td>Surface and Maritime Transport Authority</td>
</tr>
<tr>
<td>T-CBRTC</td>
<td>Tripartite Cross-Border Road Transport Commission</td>
</tr>
<tr>
<td>TRIPS</td>
<td>Tripartite Transport Registers and Information Platform and System</td>
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1 Cross-Border Road Freight Transport Industry

1.1 Introduction

Cross-border transportation can be defined as the activities and flows that ensure the passage of passengers and freight across an international border. This transportation can be facilitated, monitored, controlled and even prevented. Unless all goods are unloaded and transferred at the border, cross-border freight movement involves some trade in transportation services. For example, if a trucking company registered in country A moves a consignment to a destination in country B, it is providing transportation services in a foreign country as soon as it crosses the border. This brings up two types of problems:

- The first is compliance with technical standards for transportation operators, which may vary between the two states.
- The second is cabotage restrictions that limit the ability of transportation providers to sell their services in a foreign country.

Generally, the conveyance of goods by road transport is usually subject to statutory requirements governed by treaties and or agreements that control, facilitate or prevent cross-border transport. This report reviews the various guidelines that govern cross-border road transport in the Southern African Community (SADC), the Eastern African Community (EAC) and the Common Market for East and Southern Africa (COMESA). It examines the existing conditions for market access and for entry into the profession and suggests recommendations for the facilitation of cross-border road transport in these three regional economic communities (RECs).

1.2 Overview

The road freight industry in East and Southern Africa faces several bottlenecks and constraints. They include delays at border posts, informal payments and several other impediments that increase the cost of operation. These constraints have a negative impact on both own-account (freight transportation between establishments of a same firm) and for hire or reward (third party) road freight transport operators. Road freight is a key sector of the national and regional economy. It plays a major role in market integration and has a direct impact on transaction costs for economic agents. The sector accounts for over 75% of all inland freight transport in the COMESA, EAC and SADC regions. The sector also contributes significantly to countries GDP. In the tripartite alliance of COMESA, EAC and SADC there is a clear awareness of the importance of transport facilitation to achieve trade integration. The member states in these regional economic communities (RECs) have adopted measures and rules aimed at liberalising transport, harmonising transport rules and developing infrastructure in the sub-region. Eight states in Southern Africa are members of both COMESA and SADC and have ratified the transport protocols of both organizations. There are specific protocols that provide for the organisation of the industry in ESA. These are outlined in the following sections.

---

1 The World Bank
Africa Transport Department
Africa Sustainable Development Division January 2008
1.2.1 East African Community (EAC)

In the EAC protocol No. 6 of the East African Treaty governs the operation of road freight transport. The following are the provisions of the protocol:

a) It provides for the transport by road of goods in transit.
b) It sets rules regarding (1) road transit transport, (2) the technical requirements for vehicles, and (3) transport contracts and the liability of road carriers.
c) It stipulates that the national laws and regulations of the Contracting Party on whose territory the operation is being carried out are applicable:
d) It provides for road transport permits. These may be issued by the states in whose territory transport takes place, subject to issuance of a certificate of fitness to the vehicle and to compliance with the technical requirements for road vehicles as set forth in the protocol.
e) It stipulates the need for a consignment note (bill of lading), which confirms the transport contract. This contract document contains the particulars enumerated in the protocol plus any particular that the parties to the carriage contract may deem useful.

1.2.2 Southern African Development Community (SADC)

The protocol that deals with cross-border transport in the SADC region is the protocol on transport and meteorology, under Article 5. It states that Partner states agree to the following:

a) To facilitate the flow of goods and passengers by promoting the development of a strong and competitive commercial road transport industry.
b) Liberalize their market access policies on the cross-border carriage of goods, with the objective of all reaching the same degree of liberalization, through bilateral and multilateral agreements between states addressing the need for single SADC carrier permits or licenses, quota systems, and the establishment of bilateral or multilateral road transport route management groups;
c) To develop harmonized transport law enforcement, harmonized safety standards, third-party insurance, training and testing of drivers, etc.;
d) To cooperate to develop and implement a coordinated regional traffic quality management plan to improve road traffic safety;
e) To protect the road infrastructure, exchange and transfer technology with the establishment of a regional coordinating body comprising representatives of all executive law enforcement authorities responsible for roads; and
f) To initiate traffic management and control for implementing and managing a harmonized road traffic quality management plan.

In pursuit of the goals of a regional integrated market, and in common with other sub-regional organizations, COMESA and SADC have focused on two major sets of rules:

- liberalisation of market access in respect of carriage of international road freight, and
- harmonisation of rules to ensure interoperability within sub-regions.
1.2.3 Common Market for Eastern and Southern Africa

The protocol on Transit Trade and Transit Facilities of the COMESA Treaty provides for cross-border transport in the COMESA. COMESA replaced The Treaty for the Establishment of a Preferential Trade Area (PTA) for Eastern and Southern Africa. Under the COMESA Treaty the Protocol on Transit Trade and Transit Facilities facilitates cross-border transport. This protocol provides that:

a) all transit traffic has freedom to cross the territories of the Common Market whether from or to Partner States or from and to third countries, subject to any restriction imposed by a Partner State for the purposes of safety, public health, etc., and generally public interest, until a common external tariff is established,

b) no import or export duty is to be levied on transit trade; rates and tariffs shall be applied without discrimination. Administrative charges may be levied.

c) all carriers engaged in transit traffic shall be licensed. Satisfaction of the technical conditions of the carriage shall be a condition of licensing.

d) standard Common Market transit documents will be used to accompany goods in transit.

e) a completion guide for COMESA Transit goods will be transported under seal.

f) Unless there is suspicion of abuse, goods in transit shall be exempt from import or export duties, and not be subject to Customs examination at Customs offices.

g) All transit traffic shall be covered by Customs bonds and sureties’ arrangements.

h) Partner States undertake to facilitate the transfer to other Partner States of the funds necessary for the payment of premiums, penalties, bonds, etc. related to transit operations.

i) Partner States shall adopt minimum requirements for the insurance of goods and vehicles.

j) The scheme provides at least minimum guarantees like those required by the laws in force in the Partner States when an insured vehicle is transiting the territories of other Partner States.

k) The scheme is based on a Common Market Yellow Card issued by a national bureau and handed over to motorists on the usual terms by an insurer authorized to undertake this type of business.

l) A national bureau, composed of insurers, will settle on behalf of the insurers the claims arising from accidents caused abroad by the holders of cards they have issued and claims arising from accidents caused in its country by holders of card issued by other national bureaus.

m) Yellow Cards, proof of the existence of an insurance policy, are issued for a maximum of one year and for a specific vehicle. Notwithstanding the insurance policy under which it is issued, the Yellow Card provides all the guarantees required by law governing motor vehicle insurance in the country in which the accident occurred.

In line with the various treaties, agreements and protocols various member states in a number of road transport facilitation programmes and these are illustrated in Table 1. As mentioned earlier, the rate at which these facilitation programmes are being implemented which leads to a variation the regulations from one country to another which constraints cross-border road transport due to variations in conditions of operation. As long as these variations continue to exist, liberalising the
industry remains a wish throughout the three RECs. Statistics in Table 1 indicate that more than half of the member states are below 60% implementation.

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Table 1. Regional road transport facilitation programmes, 2012

**Abbreviations:**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>N/A</td>
<td>Not applicable due to geographical location</td>
</tr>
<tr>
<td>%</td>
<td>Percentage performance shows the extent to which each country has implemented the programme</td>
</tr>
<tr>
<td>CCL</td>
<td>COMESA Carrier Licence</td>
</tr>
<tr>
<td>COMESA transit plates</td>
<td>COMESA transit plates  Plaque fitted at the front and rear of heavy goods vehicles involved in COMESA transit operations</td>
</tr>
<tr>
<td>HFX</td>
<td>High frequency X-border Land Mobile Radio Communications System</td>
</tr>
<tr>
<td>Overload Control</td>
<td>This is an application of fees based on pavement damage and the use of COMESA</td>
</tr>
<tr>
<td>HRTC</td>
<td>Harmonised Road Transit Charges</td>
</tr>
<tr>
<td>MWG</td>
<td>Multilateral Working Group</td>
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Although there is a common awareness of the need to have a competitive cross-border road transport in terms of high operating costs, the efforts to reduce these challenges still remains a problem. Efforts to eliminate or reduce the bottlenecks vary from one country to another. Thus, there are varying degrees of both tariff and non-tariff constraints that affect the competitiveness of cross-border road transport. For instance, despite the existence of the EAC Treaty and its provisions, there still exist bottlenecks in the passage of road freight due unnecessary roadblocks. These lead to corruption where operators are subject to informal payments in order to avoid unnecessary delays. This again adds to the cost of conducting cross-border transport. This is also
common at border posts where unnecessary delays promote corrupt tendencies that increase the operating costs for operators conducting cross-border road freight transport in the various RECs. Thus, the road transport sector plays a very important role in the movement of freight in SADC, COMESA and EAC. The sector contributes to at least 75% of the freight transport given the fact that rail has had very low levels of investment. The movement to from ports is being undertaken by road transport, especially with the increase in containerisation of cargo. Therefore, the unnecessary delays and bottlenecks experienced affect not only the operators engaging in cross-border transport but the whole regional economy. Reducing delays through the removal of the various bottlenecks should be the priority of all member states in the three RECs because this reduces the overall logistics costs of transporting goods.

Road transport is playing a very important role in the movement of goods throughout SADC, EAC and COMESA transport network, particularly where there is no rail service. Even where rail service is available, road transport plays a complementary role, noting that investment in rail has been very slow thereby creating a huge capacity gap, which is being filled by road freight transport throughout the three RECs.

1.3 Road Transport vs other Transport Modes

The competitive edge of cross-border road transport is being eroded by the various bottlenecks discussed earlier. For example, at border posts trucks can be delayed for as long as three days or even more than that. The situation gets worse where the operators have to cross several borders to convey goods to and from foreign countries. The productivity per unit is significantly affected as a result of the various bottlenecks and this continues to affect the competitiveness of the road transport industry.

Generally, road transport is supposed to be competitive due to its flexibility to offer door-to-door deliveries. With the decline of rail transport service, road transport is supposed to offer an alternative to shippers moving freight throughout SADC, COMESA and EAC. The increased cost imposed by the various non-tariff and tariff barriers increase the cost of doing business. Road transport is offering the link between production and consumption regions with the ports for both imports and exports.

For long distances rail would be more competitive in terms of rates and also in terms reduced delays because customs procedures that affect road are carried out at destination. Improved border post processing of documents and clearing of goods would improve the competitiveness of road transport. At the moment border posts are a source of long delays, which increase the cost of road transport across the border posts in SADC, EAC and COMESA. The implementation of one-stop-border post is seen as a solution, but still due to corrupt practices, the benefits are not fully realised because delays still occur where they have been implemented.

2 The Road Transport Industry and Regional Policy

2.1 Introduction

The industry is composed of both third part and on-account operators. However, the on-account transport operators constitute a very small percentage of cross-border transport activities. Most of
on-account operators are involved in local transport operations. Most on-account operators are chain store owners delivering fast moving consumer goods (FMCG) such as groceries and beverages. They constitute less than 5% of the overall cross-border transport fleet. These operators are not subjected to the same requirements as those operating for hire services such as operating permits. Furthermore, most of their operations involve overnight deliveries not long distance requiring several days of travel. These operations are prevalent in the Southern African Union (SACU).

In the rest of SADC, EAC and COMESA, over 90% of cross-border freight transport is third party transport operations. The access to various parts of the region requires the operator to obtain a cross-border transport permit. These permits are issued in the countries of operator registration or at the border of the destination country, especially in countries such as the Democratic Republic of Congo (DRC). This variation is a matter of concern because there is no harmonisation of operating conditions. Therefore, operators are subjected to different conditions to access various parts of the region. There has not been much work achieved in terms of harmonisation of these conditions although efforts are underway to harmonise operating conditions in SADC, EAC and COMESA regions. Prevailing laws and legislation in the member states govern operators’ access to the profession. Regional instruments such as treaties and agreements facilitate access to various parts, but enforcement of the rules still varies from one country to another which affects operators involved in cross border transport.

2.2 Organisation of the Industry

The road transport industry is composed of on-account and public transport (transport for hire and reward) operators who operate either locally or across national borders. The basic requirement for public transport operators carry goods for reward is to obtain a permit for the vehicle combination that will convey the goods. In order for a vehicle to qualify for a permit it must certify certain stipulated quality standards. Therefore, the vehicle(s) must be issued with a certificate of fitness or roadworthiness in order to qualify for an operating permit. The permit to operate is issued by the relevant government department in the country of registration. The condition for roadworthiness or fitness certificate is also a requirement for on-account heavy goods trucks.

In order for an operator to engage in cross-border transportation of goods, a relevant permits applying in the country or region of operation. For origins and destinations in the COMESA, the operator will require a COMESA permit, also issued by the same authority issuing local permits within the country of registration. The COESA permit which lasts for one-year costs $150. This permit is supposed to be renewed annually subject to the roadworthiness of the vehicle. In order to qualify for a permit, the local operations the operator is required to obtain the relevant permit for the type goods to be transported. Specialised cargo such as dangerous goods and abnormal loads will require special permits. It is essential that the guidelines be designed to recognise the role of operators and their national and regional bodies.

2.3 Conditions for Access

Access to the carriage of goods by public transport requires the operator to obtain an operating licence. Own account transport is considered as private and does not require an operating permit. An additional permit is required for an operator to engage in cross-border transport. For an operator to carry goods to or in transit of COMESA, a COMESA permit must be obtained as stipulated in
the protocol. The same applies to EAC and SADC. The relevant permits must be obtained before an operator can access the market. Apart from the permit requirement, vehicles must meet certain safety standards and proof of insurance. There is also need for commercial guarantees for cross-border transport operation. Transit bonds issued by clearing agents are also a requirement for goods in transit as guarantee that goods will not be directly imported.

2.4 Regional Enforcement of Rules

The enforcement of regional rules can only be effectively enforced at national level. The practical way of enforcing regional rules cost effectively is by domesticating the regional rules in order that the agencies responsible for enforcing transport rules and regulations perform the enforcement of such rules.

2.5 Enforcement of Regional Rules at Country Level

The approach of enforcement of the new rules outlined here are extracted from the proposed COMESA, EAC and SADC agreement to harmonise standards for the regional cross-border road transport sector. It is recognised that the introduction of the system for Operator Registration with the requirement for Responsible Competent Person and the support of the integrated databases will enhance and strengthen the capacity of the public sector in all Member States in support of the strategic planning, enabling regulatory monitoring and enforcement functions.

3 Liberalisation of the Road Freight Industry

3.1 Introduction

The liberalisation of the road freight industry is very important because it improves the competitiveness of the sector. There are several regulatory processes in SADC, COMESA, EAC that impact on the competitiveness of cross-border road freight transport. These include market access and other constraints such as financing and different forms of restrictions, including prohibition cabotage and the third-country rule. The third-country rule demands that an operator must always pass through the country of registration, thereby imposing a restriction of market access. Also considered are the existing conditions of financing and renewal of fleet for the industry. Finally, a section on improvement recommendations for the cross-border road transport industry is provided as conclusion to the guidelines.

3.2 Efficiency and Competitiveness of the Industry

One of the challenges to ensure efficiency in the sector is a challenge given that there are several factors beyond the control of the industry that render it inefficient. For instance, the disparities in the tariffs and charges levied which are not harmonised, there are instances where the costs are higher than usual, which increase the operating costs. There are also several regulatory policies that make productivity per unit inefficient due to reduced turnaround times, which result in low productivity. Cross-border transport is prone to a multiplicity of regulations, which are continuously changing. Regulations such as cabotage lead to empty trips in many cases, particularly where there is an imbalance in economic activity.
There are many instances where some trips barely cover the full operating costs, whereby some operations need to be cross subsidised by other routes. The bureaucratic processes common at most regional border posts, vehicles are delayed for a considerable period leading to a lot of inefficiency and making it very difficult for the sector to be competitive. Operators sometimes charge a premium tariff to compensate for uncertainties, making it difficult to make the tariffs competitive.

The discrimination of foreign registered vehicles when operating outside the countries of registration, force operators to sometimes charge below market rates. These conditions do not support competitiveness of the industry because of the unevenness of operating conditions. The only way to improve the competitiveness of the industry is through liberalisation of market access and the harmonisation of the rules of operating for all operators, whether domestic or foreign.

The other challenge is the cost of capital for the financing of fleets. The market condition for accessing operating capital and finance for the purchase of trucks is not even. In some countries access to capital is reasonable with interest rates relatively low, whereas in others finance is very expensive, hence making it difficult for the industry to be competitive, especially for operators with no access to cheaper finance.

Therefore, efforts to liberalise the industry being negotiated by the COMSA, EAC and SADC the most recent one being the Multilateral Cross-Border Road Transport Agreement (MCBRTA). The details of the proposed improvements are listed in annexure 1 through to 6. These proposed improvements are very important. However, unless the attitude of member states changes in terms of commitment to implementing them, they will be another example of efforts that never fully achieve the intended outcome like the predecessor agreements and treaties.

3.3 Conditions for Access to Freight

In ESA a licence or permit is required to carry goods across borders. The COMESA permit, which replaced the Preferential Trade Area (PTA) Permit, is the one that is in use. The operation can start only once approval is obtained. On the other hand, the permits are usually open-ended and valid throughout the entire country. The entry regulations also apply to own-account transport. One point to note is that the regulations on access to the road freight business described here come on top of administrative procedures which apply to all firms.

Other than technical requirements, financial soundness, moral soundness and public safety requirements are also taken into consideration in deciding on the entry of new operators. In the context of liberalisation of the sector, most transport activities have been opened up to domestic competition and restrictions concerning particular activities (such as private carriage, backhauling, contract carriage or intermodal operations) are increasingly rare.

3.4 The Role of Industry Bodies

The role of industry bodies or commercial interests in shaping and implementing the regulations applicable to the sector is not easy to analyse. In fact, it can be interpreted in two diametrically opposite ways: firstly as part of a consultative effort to involve stakeholders in the decision-making process; and, secondly, as a way of protecting firms already in the market (acting as their own judge and jury). Within member states of COMSA, EAC and SADC there are industry bodies to which most operators subscribe and these lobby for their members. The mother body is the
Federation of Southern and East Africa Road Transport Association (FESARTA). This body attends most of the fora where issues on regional transport are discussed and it strives to represent the interest of members and acts in their interests.

3.5 Liberalisation of the Road Transport Sector

The available evidence shows that, contrary to industry predictions, liberalisation has not led to destructive competition, instability or a reduction in safety standards. This is illustrated in table two which lists the various phases of the cross-border road freight industry liberalisation. For example, in both Australia and the United States competition is thriving but no adverse effects on the industry were experienced after the elimination of entry barriers and pricing restrictions. In the United States, despite a dramatic increase in truck traffic, safety actually improved after liberalisation, with the number of years of potential life loss declining by over 30 per cent in 15 years.

Despite the general acceptance that liberalisation will benefit all member states in ESA, there has not been much effort by member states to fully liberalise the cross-border road transport industry. Member states tend to be protective of local operators, discriminating against foreign operators. There is a common tendency for conflicting application of the rules that control cross-border road transport. In order to avoid conflict on the application of rules by the different RECs, the rules need to be modernised to incorporate the new rules in keeping the changing needs of the sector. This improves the competitiveness of the industry in the three RECs.

Therefore, all member states must be encouraged to modernise the legal instruments to cater for regional road transport. These improvements must be in the form of amendments to the existing domestic rules. The amendment of existing legal instruments is less costly exercise than having to rewrite the legal instruments. The RECs must agree on the various rules that need revision as agreed and then set a timetable for the modernisation of the rules. The implementation would then be phased starting with the most pertinent ones which are seen to produce quick wins and progress to ones that are seen as not urgent. The proposed approach is seen as the most appropriate given that appetite to enforce the new changes would vary from country to country depending on the complexity of the legislative processes in each member state.

3.6 Stages of Liberalisation

There are basically six distinctive phases in the road freight transport liberalisation process. Each phase has got specific characteristics in terms of impact to operators and the countries involved. There is phase 0 where no reciprocal access exists at all. Under this situation all cross-border transport is performed by carriers in the home country of origin. This entails protection of local carriers with increased rates due to one-way haul. The production and distribution costs are relatively high. Typical examples are the United States of America and Mexico.

The next situation is phase 1 where transport is between states A and B only. The example is what exists between the United States of America and Canada. Under this phase the transport of goods is only by trucks registered in the two countries. This restricts the market, which is confined to local industries import/export demand and excludes external competition resulting in cartels. Thus, this limits scope transport market and may increase transport costs. There is a need for regulatory action such as operating permits.
Phase 2 involves the transport of goods between country A and B or on a defined route from A in transit through B to C or D, only if the trip includes travel in A (Third-country rule). This permits transport by carriers from A to B, C, D in both directions starting or ending in home state. There is more flexibility to achieve backloads.

Under Phase 3, there is no restriction on carriers of State A to transport goods on defined routes between B and C or D even if the journey does not home state travel. Transport by carriers from A to B can include backhauls and extended operations between B, C and D, allowing circular routing and optimising backhauls by pickup and drop along multi-country routing, thereby increasing vehicle utilisation. This generally increases options for contracting carriers seeking backhaul cargo along routes leading to reduced rates, which will benefit shippers in the region. The result is increased competition in the transport market and increased logistical flexibility and trade integration with neighbour states and the region as a whole. It lessens need for monitoring carrier O & D. An example is what exists in Mozambique – SA Zambia – SA Malawi – SA Zambia – Tanzania.

Phase 4 exists when operators transport goods on any route from A between B and C without restriction. Transport by regional operators happens between all states without any restriction. This increases market opportunities and promotes competition. This results in better vehicle utilisation and the increased need for logistics coordination with increased vehicle control and coordination.
<table>
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<tr>
<th>Phase</th>
<th>Conditions</th>
<th>Description</th>
<th>Impact on carriers</th>
<th>Impact on industrial Users</th>
<th>Impact on Country</th>
<th>Impact on Authority</th>
<th>Example</th>
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<tbody>
<tr>
<td>Phase 0</td>
<td>No reciprocal Access</td>
<td>All transport in each state is performed by own carriers Cross-border transport is all one way</td>
<td>Protection of local carriers increases rates One way haulage means empty backhauls and increases rates</td>
<td>Higher transport costs Lower competitiveness</td>
<td>Reduced investment in potential exports industries Higher local production and distribution costs may encourage imports of made-up goods</td>
<td>Minimal regulation – policing only Reduced taxation income Reduced industrial development</td>
<td>Mexico - USA</td>
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<tr>
<td>Phase 1</td>
<td>Transport between states A and B only</td>
<td>Transport of goods between states A and B only by carriers registered in those states</td>
<td>Restricted markets confined to local industries and import export demand Exclusion of some external competition May promote formation of cartels</td>
<td>Need to contract with specific carriers for specific routes or countries may increase rates</td>
<td>Limits scope transport market and may increase transport costs</td>
<td>Need for regulatory action such as permits</td>
<td>Canada - USA</td>
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<tr>
<td>Phase 2</td>
<td>Transport of goods between States A and B or: on a defined route from A in transit through B to C or D – only if journey includes travel in A</td>
<td>Transport by carriers from A to B, C, D in both directions starting or ending in home state</td>
<td>More flexibility to achieve backloads Restricts markets to two way trade between home state and other states Increases competition among carriers</td>
<td>Permits contracts with carriers from more states. May improve competition and reduce rates May reduce buy-ins or buy-outs of carrier companies</td>
<td>Higher level of trade integration Reducing logistics costs. Increased flexibility of transport market</td>
<td>Increased activity may need further regulation to effectively control the carrier O &amp; D actions</td>
<td>SACU</td>
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<tr>
<td>Phase 3</td>
<td>No restriction on carriers of State A to transport goods on defined routes between B and C or D even if the journey does not home state travel</td>
<td>Transport by carriers from A to B can include backhauls and extended operations between B, C and D</td>
<td>Allows circular routing and optimising backhauls by pickup and drop along a multi-country routing. Increases vehicle utilisation</td>
<td>Increases options for contracting carriers seeking backhaul cargo along routes Reduces rates</td>
<td>Increased competition in the transport market Increased logistical flexibility and trade integration with neighbour States</td>
<td>Lessens need for monitoring carrier O &amp; D</td>
<td>Mozambique – SA Zambia – SA Malawi – SA Zambia – Tanzania</td>
</tr>
<tr>
<td>Phase 4</td>
<td>Transport on any routes, of goods from A between B to C or D without restriction</td>
<td>Transport by regional carriers between all States without restriction</td>
<td>Increased market opportunities Increased competition Better vehicle utilisation Increased need for logistics coordination from all origins and destinations Increased vehicle control and scheduling</td>
<td>More flexible market More options for contracting carriers More competition, lower rates</td>
<td>Promotes optimal levels of competition and freedom to develop transport systems</td>
<td>Reduces monitoring and concentrate on quality regulation</td>
<td>Zimbabwe – SA</td>
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<tr>
<td>Phase 5</td>
<td>Free market in region including cabotage</td>
<td>Any carrier registered and properly equipped, able to perform transport throughout the region</td>
<td>Increased completion for local carriers in all countries Likely to reduce number of operators but increase professionalism</td>
<td>Provides options for contracting best possible operators or setting up inter-company carrier operations Reduces cost</td>
<td>May attract FDI in transport and distribution companies Reduced logistics costs</td>
<td>Eliminates permits, licences operators and concentrates on quality regulation</td>
<td>European Union</td>
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</table>

Table 2. Stages of increasing liberalisation of the regional transport
This promotes a flexible market, with more options for contracting operators, leading to more competition and lower transport rates. It promotes optimal levels of competition and freedom to develop transport systems and reduces monitoring and concentrates on quality regulation. This level of regulation is what currently exists between South Africa and Zimbabwe.

The last one is Phase 5, which involves a free market in region including cabotage. This is the ultimate stage of liberalisation. Thus, any carrier registered and properly equipped, able to perform transport throughout the region has access to the market without restriction. There is increased completion for local carriers in all countries with a likelihood of a reduced number of operators but increases professionalism. This level or liberalisation provides options for contracting best possible operators or setting up inter-company carrier operations and reduces transport cost. This scenario may attract foreign direct investment (FDI) in transport and distribution companies, leading to reduced logistics costs. This also ensures newer fleets as capital is injected through FDI. It eliminates permits, licences operators and concentrates on quality regulation. This is the scenario existing in the European Union (EU).

4 Relation of the Industry with Maritime Sector

The maritime companies do not use own account fleet to transport goods, instead they hire trucks on behalf of their customers. However, there are a few that have also entered the industry and have registered as operators, especially in South Africa. The private cross-border trucking sector is made up of large companies with many trucks. Because cross-border operations require large capital outlay, there are very few small operators in the market. These usually go through the maritime sector to access loads as part of contractors. There is a very strong relationship between road transport sector of the region and the maritime sector. The two sectors mutually benefit from each other from an intermodal point of view. For instance, imports from overseas generate freight traffic for the road transport sector, which transports the cargo to various parts of the region. In return the maritime sector depends on road freight transport to access freight cargo from the inland, especially with the continued decline in the performance of the rail sector, road plays a very important role of bridging the gap left by low investments in rail.

The continued increase in the containerisation of cargo has increased the interdependence between road freight transport and the maritime sector. Even where cargo is carried by rail from the port, the eventual door-to-door delivery will be carried out by road. The maritime sector not only generates cargo for the road sector, but it also is responsible for the clearance and forwarding of the cargo delivered or to be transported by road. Freight forwarders and clearing agents, who belong to the maritime sector, play a very important role of document preparation and clearing of road fright the cargo through customs. Clearing agents also generate cargo for road transport as brokers for various shippers, providing a market for transporters to access freight. In the region, this sector plays a very crucial role of raising bonds, guarantees and providing insurance for transit cargo, all of which are fundamental statutory requirements for goods in transit in all the economic blocks of COMESA, EAC and SADC.
5 Road Freight Industry Financing Systems

The conditions for financing and for renewal of fleet in the three blocks are different depending on the strength of each country. The South African financial sector is very strong, hence companies can access finance to finance both operating and capital to invest in the renewal of fleet. For instance, reputable registered operators can finance new fleet through hire purchase (HP). Under these schemes an operator approaches a bank for a loan to purchase trucks. The bank assesses the business of the operator to determine if the company would be able to pay back the loan. Once the bank is satisfied with the credit rating of the company, it then finances the purchase of the fleet, but holds on to registration books of the vehicles until they are paid up. Due to these stringent assessments, most small operators are unable to obtain finances through the banks and hence they can only fund the renewal of fleets on their own. Therefore, new fleet is mostly financed off balance sheet, where the company’s balance sheet is strong enough to meet the bank’s credit rating. The second method would be based on off-take contracts obtained from customers, which can support the application for fleet financing. Under this arrangement, an operator must produce evidence of transport contracts signed with customers to support the application for the financing of the purchase of trucks. Most of these contracts are local contracts with large conglomerates such as mining houses. These normally issue contracts running for several years, which would justify the banks financing of the purchase of new fleets, again on condition that the bank keeps the registration books of the vehicles as guarantee until the full amount is recovered.

Unfortunately, operators in countries where the financial sector is not strong enough, the banks tend to be risk averse and would not fund movable assets such as trucks. In such instances operators have to finance their own fleet from financial reserves from earned profits. In countries like Zimbabwe, where the economy is struggling, operators tend to finance their fleets with very little or no banks’ support at all. The result is that fleets take too long to be renewed and in most case second hand trucks are the only alternative, mostly from the USA and these are left hand drive driving on the left side of the road. In these countries to encourage environmental friendliness in the sector is constrained by lack of access to capital for the renewal of fleets.

However, there are operators who are registered in a number of countries, whereby they are able to leverage funding from countries where economies are strong, but these are very few. The situation can also lead to an oligopolistic situation in the sector, where a few large companies dominate the market, since capital becomes an entry barrier for small operators who struggle to access funding.

6 Industry Best Practice

There is no clear best practice in terms of competitiveness in ESA due to the common delays experienced by operators at border posts. What can be considered to be close to best practice is the situation in the SACU area because restrictions of operators are limited and also because trade rules are less restrictive compared to other parts of ESA. Financing of fleets is considerably easier than the
rest of the other parts of ESA due to a very strong financial sector in South Africa. Reputable operators have easy access to funding compared to their counterparts in the rest of the region. For this reason, operators in the SACU area have relatively newer fleets, which are environmentally friendly and are regularly renewed.

The manufacturing and assembling of trucks exists in South Africa, which makes the cost of acquiring new fleets relatively cheaper compared to other parts where import duties make the costs higher.

### 7 Improvement Recommendations

The road freight industry has undergone sweeping changes in the past two decades, with a rapid growth of new forms of competition in both its truckload and less-than-truckload segments. In order to improve the competitiveness of cross-border road transport, countries in SADC, EAC and COMESA must relax regulations unduly restricting market access. Still, the pace and scale of liberalisation has varied widely from one country to another, which will be the case of the COMESA, EAC and SADC. The main remaining impediment to competition is the restrictive web of bilateral international and/or multilateral agreements that continue to impose discriminations on foreign hauliers. It is important to note, however, that regulations in both industries continue to evolve rapidly and, to some extent, the reported cross-country differences in regulatory approaches may have been reduced by reforms implemented through the recommendation by the RECs. It is unfortunate that even with these RECs' efforts, most member states are very slow in implementing the recommended reforms.

The available empirical evidence suggests that liberalisation has promoted efficiency and consumer welfare in the countries that have implemented reforms. Regulatory reform in the SADC, EAC and COMESA would promote competition and reduce transport rates. In the Southern African Customs Union (SACU), there have been significant efforts to allow competition. However, even here, cabotage is restricted which still makes the industry uncompetitive due to empty backhauls. Through allowing operators from various countries encourages competition to thrive and encourages a stable industry environment and safety levels to improve. At the same time, freight rates are reduced, enhancing productivity and innovative activity stimulated. There is still a lot of work that needs to happen in terms of reforming the cross-border road transport industry in SADC, EAC, and COMESA in order for the sector to be competitive. The recommendations made through the various protocols have achieved very little to improve competitiveness due to countries being protective of local operators.

For COMESA, EAC and SADC the recommendation is that regulation guidelines must focus on quality instead of quantity regulation (permits and discriminatory statutory instruments). Therefore, instead of focusing on permit for access to the industry, the focus should be on professionalism and safety standards and condition of fleet and environmental friendliness. There are principles that apply to both road and rail transport. In all member states there are road transport operator quality controls that would form the baseline for quality regulation.

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2 Boylaud and Giuseppe, 2001
Therefore, the denominator and or base for all regulation should be the operator. It is recommended that operating licences be only issued to operators who meet the specific conditions agreed at RECs level but incorporated into the country standards. This approach would not be anything new because already the COMESA inter-states road carrier licence and the SUMATRA road service licence and similar road transport licences follow these principles where road transport management systems are the cornerstone for maintaining professionalism and equipment high standards.

Another recommendation is that all aspects of operations must be linked to the responsible operator. Also all operators must be registered and that only those operators who meet prescribed conditions may undertake cross-border transport business. In this case each country may only permit qualified operators to cross borders and neighbouring countries may permit them to enter and operate.

Lastly, the qualification of operators must include financial, vehicles, drivers, competent persons, maintenance records, operating returns (good standing) and monthly reports. Thus, funding challenges can be addressed by creating an environment that allows reputable operators to access capital beyond the national borders because this is one of the limiting condition on renewal of fleet by operators in countries where the financial sector is not strong, a situation that is perpetuating the operation of old and unsafe fleets that are not environmentally friendly. Linked to this recommendation is the requirement for governments to relax import tax and duties on the importation of new fleets so that operators can afford new fleets.
8 References

Bingandadi L (2012): Presentation on Cross-Border Transport Regulation in the Tripartite Region-current status and plans. SADC Secretariat


Giersing et al. (2008): Focus on Zambia and Lessons for Landlocked Countries, World Bank


Facilitation of Transport and Trade in Africa, SSATP.


9 Annex 1

9.1 Article 6: Operator registration guidelines

1. Each Member State shall create a suitable institutional structure for management of an electronic Operator Registration System. Where such institutions already exist, they will be identified and will form the national contact point with the T-CBRTC provided for in Article 4 of SADC, EAC< COMESA Multilateral Cross-Border Road Transport Agreement (MCBRTA).

2. An application for Transport Operator registration shall include the information prescribed in Article 7 of this Agreement. Give this Article 7 – which agreement you are referring to?

3. Registered Transport Operators, complying with all the requirements of Article 7, shall on application, be provided with cross-border Operator Discs?? for the vehicles complying with the quality standards, which shall entitle them to operate within the territory of any of the Contracting Parties. Permission to operate in the territory of Member States does not include the right to perform cabotage.

What are these cross border operator discs – what form? how they work?

4. The Registering Authority of Member States issuing the cross-border Operator Discs effectively vouches for the registration of the Transport Operators, their insurance, vehicle condition, driver competence and compliance with national transport legislation, as an assurance to neighbouring states that the operator should be allowed into their territory.

5. The electronic Operator Registration System of each Member State must contain a method for recording contraventions, violations and offences in terms of Article 12 of this Agreement.

6. Non-compliant Transport Operators will be refused cross-border Operator Discs and the Operator Discs of registered non-compliant Transport Operators will be suspended and/or cancelled by their national Registering Authority in accordance with the prescribed sanctions.

7. Registration of Transport Operators is only permitted for undertakings with established depot facilities to support the quality of their transport operations and permanent physical addresses in the country of application. Don’t understand

10 Annex 2

10.1 Article 7: Terms for Registration of Operators

1. The application for registration as a Transport Operator shall be made as defined in Schedules A to C. Registration shall be dependent on submission of the required information and evaluation of the application by the Registering Authority.

2. The registration of Transport Operators shall be contingent on a commitment to be compliant with the following:

a) all relevant road traffic and transport regulations in their country of application and in countries of Member States;

b) shall not have been convicted for any infringement of national legislation, such as commercial law and trafficking in human beings or drugs;
c) roadworthiness of vehicles;
d) safety in the carriage of dangerous goods;
e) driving licences and professional driving permits, and
f) where applicable, the undertaking shall not have infringed rules regarding the driving time and rest
periods of drivers.
3. The process for evaluation of applications for registration as Transport Operator is described in
Schedule D.

11 Annex 3
11.1 Article 8: Registration of Vehicles
1. The application for registration as a Transport Operator shall include a list of all vehicles to be
included in the registration, with physical address of depot or operations centre and the location at
which vehicles will be maintained and parked.
2. Applicants in possession or control of vehicles must supply details on the application form of
vehicles owned or operated shall include the details as defined in Schedules A to C.
3. Applicants intending to start a transport business, if granted registration as a Transport Operator,
must provide details of intended vehicle acquisitions. When vehicles are purchased the details must
be submitted for inclusion on the licence.
4. Operator Discs will only be issued once the details of registered vehicles have been provided and
validated by the Registering Authority.
5. For vehicles not owned by the applicant, an affidavit from the registered owner is required,
authorizing its usage by the applicant.
6. All vehicles registered in respect of a particular depot shall be deemed to be controlled by the
nominated Responsible Competent Person employed by the applicant.
7. Cross-border Operator Discs will only be issued to Transport Operators meeting prescribed criteria
as defined in Article 9 of this Agreement.
8. All vehicles registered for use in cross-border transport shall display the Operator Identification.
The evaluation of operators’ evaluation applications is dealt with in schedule D1 and D2 of the
COMESA, EAC and SADC harmonisation agreement. These guidelines for the evaluation are
explained below.

12 Annex 4
12.1 Schedule D.1: Operator Registration
All applications for Registration as a Transport Operator for Goods and Passengers must be complete
in respect of information defined in Schedules A and B.

In addition to the supply of the required information (which is to be reviewed and checked by the
Registering Authority), applicants must meet the following criteria:
1. Produce verifiable proof of identity.
2. Provide proof of permanent residence.
3. Provide proof of current age over 24 years (in the case of companies – requirement in respect of majority shareholders and directors).

4. Provide a signed statement that the applicant is not subject to any legal processes relative to transport or trade.

5. Provide verifiable proof of Public Liability Insurance by way of a Letter of Confirmation from the Insurer stating the following:
   - Name of Insurer
   - Policy number
   - Duration of cover, including expiry date
   - Area/countries covered.
   - Total value of cover

1. Applicants will attend a brief interview at which they will be required to do the following:
   - Provide evidence of knowledge of road transport management by means of present employment, past testimonials, traceable references, and evidence of training.
   - Provide brief business plan.
   - Current or intended transport activities, number of vehicles, nature of trade or business, areas to be operated, operating base and location of premises.
   - Demonstrate understanding of the implications of assuming responsibility for transport operations and the relationship between the business and the registered Responsible Competent Person nominated by the business.

2. The notes by the interviewer at the Registering Authority must be recorded on an interview template for it to be scanned and recorded on the electronic National Operator Module when the application is captured for future reference. The details of the interviewer must be recorded conspicuously on the interview template.

13 Annex 5

13.1 Schedule D.2: Responsible Competent Person Registration

All applications for registration as a Responsible Competent Person must be complete in respect of information defined in Schedules A and B.

In addition to the supply of the required information (which is to be reviewed and checked by the Registering Authority), applicants must meet the following criteria:

1. Produce verifiable proof of identity.
2. Provide proof of permanent residence.
3. Provide proof of current age over 24 years.
4. Provide valid driving licence and PrDP with remaining validity period of at least 12 months at the time of application.
5. Provide a signed statement that the applicant is not subject to any legal processes relative to transport or trade.
6. Applicants will attend a brief interview at which they will be required to do the following:
o Provide evidence of knowledge of road transport management by means of present employment, past testimonials, traceable references, evidence of training and qualifications achieved.
o Demonstrate understanding of the implications of assuming responsibility as competent person for the transport operations at a depot.
o Pass the written test for RCP.
o Provide a letter from an employer showing experience in management of a transport operation (to be certified by employer).

7. The notes by the interviewer at the Registering Authority must be recorded on an interview template for it to be scanned and recorded on the electronic National Operator Module when the application is captured for future reference. The details of the interviewer must be recorded conspicuously on the interview template.

In the absence of accredited training and educational institutions in the field of transport management, it is expected that initial registration of existing operators will include a large number of applicants being admitted in terms of the written test for RCP, but once such institutions are available the evidence of training and qualifications will become mandatory and then the written test will become an additional requirement.

14  Annex 6

14.1  Article 9: Registration of Professional Drivers

Any person driving a motor vehicle on a public road shall have a valid driving licence in compliance with the vehicle categories prescribed in Schedule E.

Member States will publish regulations to introduce a Professional Driving Permit (PrDP) for drivers employed by Transport Operators.

Drivers of goods vehicles with a GVM of more than 3,500kg, passenger vehicles with a seating capacity of more than 8 passengers in addition to the driver and vehicles conveying dangerous goods, abnormal loads in cross-border transport operations may not operate such vehicles without a valid PrDP issued by the Competent Authority.

The issuing of a PrDP shall be subject to the following conditions:

a)  Proof of Identity and age between 21 and 65 years
b)  Proof of permanent residence
c)  Present state of health confirmed by a doctor’s certificate
d)  Eye test
e)  Declaration of non-abuse of substances
f)  Police clearance of no criminal road traffic offences such as driving under the influence (DUI), reckless or negligent driving
g)  Certificate of completion of Prescribed Training Course
h) Aptitude test on the rules of the road and a driving skills test on the road

A PrDP shall be valid for not more than 2 years and the renewal of a PrDP shall be subject to the following conditions:

a) Age not older than 65 years  
b) Proof of permanent residence  
c) Present state of health confirmed by a doctor’s certificate

The standard proposed guidelines for driving licence categories proposed for SADC, EAC and COMESA are shown in Table 2. These driving licence categories are in conformance with the United Nations Convention on Road Traffic of 1968. Adoption of these categories as regional standard will facilitate conformance with international standards.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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| **C1** (18 years) | Medium goods vehicle  
Motor vehicles other than those in category D1 and whose maximum authorised mass is over 3 500kg but not more than 7 500kg; motor vehicles in this category may be combined with a trailer having a maximum authorised mass which does not exceed 750kg |
| **C1E** (18 years) | Articulated medium goods vehicle  
Combination of motor vehicles consisting of the tractor vehicle in category C1 above combined with a trailer having a maximum authorized mass exceeding 750kg |
| **C** (21 years) | Goods vehicle  
Motor vehicles other than those in category D and whose maximum authorised mass is over 7 500 kg; motor vehicles in this category may be combined with a trailer having a maximum authorised mass which does not exceed 750kg. |
| **CE** (21 years) | Articulated goods vehicle  
Combination of motor vehicles consisting of the tractor vehicle in category C above and its trailer(s) a maximum authorised mass exceeding 750kg. |

Table 3: Schedule of professional drivers’ certification categories. (MCBRTA Report, 2015)
MODULE 17 ROAD SAFETY & POLLUTION

17.1 Road Safety Issues, Challenges and Management

By Getu Segne

Table of Contents
Abbreviations and Acronyms ............................................................................................................. 2

1 Critical Road Safety Issues in Africa .......................................................................................... 3

2 Addressing the Challenge of Road Safety in Africa .................................................................. 6

2.1 Safe Roads .................................................................................................................................. 7

2.2 Safer Road Users ....................................................................................................................... 10

2.3 Safer Vehicles .......................................................................................................................... 12

2.4 Post–crash Response ............................................................................................................... 13

2.5 Road safety Management ....................................................................................................... 14

2.5.1 Establishing Legally Mandated National Road Safety Agency ...................................... 14

2.5.2 Legislations ......................................................................................................................... 17

2.5.3 Road Safety Strategies ....................................................................................................... 18

2.5.4 Road Safety Data Management System ........................................................................... 18

2.6 How to Finance Road Safety in Africa .................................................................................. 19

3 Road Safety Direction for Africa ............................................................................................... 20

4 References .................................................................................................................................. 22
### Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>GC</td>
<td>Gregorian calendar</td>
</tr>
<tr>
<td>GRSP</td>
<td>Global Road Safety Partnership</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Economic Commission</td>
</tr>
<tr>
<td>SPF</td>
<td>Safety Performance Function</td>
</tr>
<tr>
<td>UN</td>
<td>United Nation</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</table>
1 Critical Road Safety Issues in Africa

Nowadays road crash problems have become basic concerns of the developing countries. According to the report from WHO 1.2 to 1.3 million road traffic deaths occur and 50 million people get injured in the world every year (WHO, 2015). Middle and low income countries in general take a substantial share of the road traumas and injuries. Particularly in Africa, road safety is the major social, economic and health problem affecting every sector of the society. Nevertheless, the impacts of road safety problems in the continent are not well quantified due to the lack of quality crash database. Shortage of fund for covering the recording cost of injury and long term effects of crashes in the society incapacitated the process. The overall assumption however is that Africa has the highest road traffic death rates compared to all the other regions in the world. According to some estimations and reports, the toll in Sub-Saharan Africa for instance is about 231,000 deaths and over 8 million injuries in 2010 (Bhalla, Harrison, Shahraz, et al., 2014).

Most of the victims of these road traffic crashes are people between the ages of 15 and 29 years (see Figure 1). The median ages of the region almost fall under this age stratum and therefore, the active working forces are over represented in road crashes. Vulnerable road users such as pedestrians, cyclists, and persons travelling on motorized vehicles are at great risk of death and injury on the roads in Africa.

![Figure 1. Top ten causes of death among people aged 15-29 years, 2012 (WHO, 2015)](source: World Health Organization, Global Status Report on Road Safety 2015)

As indicated in Figure 2 below, the Global Status Report on Road Safety 2015 estimates the rate of road traffic deaths at 26.1 per 100,000 people in Africa. By comparison, this rate is 15.5 in North America and 9.3 in Europe. Africa possesses 2% of the world’s vehicles with 12% of the population and 16% of the fatalities.
On average, road traffic fatalities in Africa on pedestrian and car occupants accounted for 39 and 40 per cent respectively (see Figure 3). In some African countries, car occupants may have a higher share. Hence, it was suggested focuses shall be given on car occupants and pedestrian safety on national and Trans-African highways in the region, with particular emphasis to those with higher rates.

Road deaths in sub-Saharan Africa are expected to increase by 112%, from approximately 243,000 in 2015 GC to 514,000 in 2030 GC. This is a considerable increase than any other region of the world in stark contrast to the projected reduction in fatalities in Europe and Central Asia, and East Asia and the Pacific. Figure 4 exhibits the substantial increase in estimated road traffic fatalities that Africa and other low and middle-income countries have experienced over the last twenty years.
On the other hand, the growing number of vehicles and other motorized transporters, the type and quality of the vehicles is another factor contributing to the rise of the road safety problems. This is because of manufacturers giving emphases on the making of the price of the vehicle affordable rather than investing on the safety side. There is also a growth in the road network coupled with the economic boom in Africa. Since recently, the road networks are attaining double digit growth every year. Paved roads construction in this regard is lingering far behind and constitutes less than 20% of the overall road networks. Most crashes in comparison, however, occurred on paved roads. For instance, about 75 percent of the fatal crashes occurred on paved roads which only constitute less than 15 percent of the road network in Ethiopia (Tulu, 2013a). The same is true in other African countries too.

In the continent, most of the countries do not have comprehensive policies for protecting vulnerable road users and encouraging non-motorised transportation and promoting investment in public transportation. Furthermore, road traffic legislations concerning the major risk factors of speeding, drink-driving, seat belt use, child restraint and helmet wearing are yet not in act clearly. Even though most countries have some provisions for traffic laws in place, enforcement of the laws are at the infant stage. The serious lack of institutional capacity of the law enforcing bodies and petty corruptions within the police forces and other law enforcing elements are major impediments for the proper execution of the laws. Capacities at individual and institutional levels are other major challenges to intervene the current road safety problems. National Road Safety Authorities or Agencies are in place in some countries. However, they are non-functional or weak to counter and reverse the current demanding road safety problems.

World report gives emphasis on the institutional management and capacity building to tackling the growing road traffic injury burden. The six recommendations in the report directly addressing institutional management issues remain very relevant for tackling Africa’s road safety crisis over the next decade Bliss, and Breen (2009). The recommendations sited are:
• Identify a lead agency in government to guide the national road safety effort,

• Assess the problem, policies and institutional settings relating to road traffic injury and the capacity for road traffic injury prevention in each country,

• Prepare a national road safety strategy and plan of action,

• Allocate financial and human resources to address the problem,

• Implement specific actions to prevent road traffic crashes, minimize injuries and their consequences and evaluate the impact of these actions,

• Support the development of national capacity and international cooperation.

In general, funding road safety in the region is a critical issue which needs to be addressed aggressively. Clearly so, politicians in the region have many development agendas which might need to be given priority. Consequently, they fail to give the due consideration to road safety. Financing of road safety as can be observed is given less priority in the government budget allocation. Therefore, change of the attitude of politicians is highly demanded to work considerably towards underpinning funds for road safety and the minimization of road crashes.

This paper aims at developing directives to protect and secure the safety of all road users through safer road infrastructure by the combination of proper planning and safety assessment, design, building and maintenance of forgiving roads in Africa. The paper also gives a description of the critical issues of road safety in Africa, particularly national and regional roads in the continent. The paper also explains the direction on how to improve road safety in Africa. The discussion focuses on the Pillars of the Road Safety Charter of Africa which is used in developing clearer directives. The paper gives emphasis on establishing legally mandated national road safety agencies, financing road safety and preparing national road safety strategies.

2 Addressing the Challenge of Road Safety in Africa

In addressing road safety problems, the UN Decade of Action Plan for Road Safety is an important document in road safety history. It has been developed in 2011 and uses a strategy of a safe system approach. This Global road safety plan has been in effect since 2011 and will continue up to 2020 (United Nations, 2011). The theme of this plan is to reduce the road deaths by 50 per cent in 2020. The Plan provides an overall framework for road safety activities which should take place within the 10 years. The action is set up on five pillars of activities i.e. a) building road safety management capacity; b) improving the safety of road infrastructure and broader transport networks; c) further developing the safety of vehicles; d) enhancing the behavior of road users; and e) improving post-crash care. Measuring indicators have been developed to gauge the progress of each pillar and areas of concerns in road safety. Similarly, Africans had developed their own charter under the umbrella of the UN Decade of Action Plan for Road Safety.

The main objectives of this charter are:

• Speed-up implementation of national, regional and continental road safety programs,

• Contribute to the coordination of road safety in the continent,

• Facilitate the formulation of comprehensive road safety policies at country level,
• Enhance private sector, civil society organization, and non-governmental organizations participation in road safety issues,
• Promote the harmonization of the collection, treatment and dissemination of road safety data.

These objectives and the UN Decade of Action Plan for Road Safety pillars have been broken down to come up with the visible pillars from the African context. The first duties and commitments of the Charter are to road safety management, and the creation and institutional strengthening of these agencies. Financing, monitoring and evaluation could be the backbone of the charter.

The Regional Economic Commission (RECs) of Africa would like to provide direction to reduce the road safety crisis in the region. The strategy is based on the five pillars of the African road safety charter or safe system principles to improving road safety in the continent (Africa Union, 2011). The charter requires a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users and post-crash management. This section outlines the way forward to tackle Africa’s road safety challenges, and propose the institutional arrangement and capacity building schemes in the continent.

2.1 Safe Roads

Safe road begins by enhancing and promoting vulnerable road users’ safety as a top priority. Most people in Africa are either pedestrians or travel using bikes and other non-motorized forms of transportation. To the contrary and the embarrassment of everybody, non-motorized transportation facilities are not given due attention in many African countries. However, there is a new complete street approach and the concept is particularly important for African cities. The complete streets concept tends to improve safety for everyone, increased biking and walking, and show a mix of increases and decreases in automobile traffic by reducing travel speed. Compared to conventional transportation concepts or hierarchical approach of building road network, the complete streets approach is a remarkably affordable way to achieve transportation goals by most African countries. In terms of economic returns, the limited data available suggests complete streets approach is related to broader economic gains like increased employment and higher property values. It also encourages protecting the environment and road user safety. Moreover, the majority of roads with complete streets features will have fewer crashes and fewer injuries after completion and opened to traffic compared to that before the improvement.

National road design manuals for roads and bridges are in place in some countries and others apply an international road and bridge design manuals from affluent countries. In particular, regional highways corridors ( e.g. Lagos–Mombasa , Cairo –Cap town, Algeria-Legos, Tripoli-Windhoek, Cairo-Gaborone, Dakar- N’Djamena, N’Djamena, Dakar legos, Beira-Lobito highways, etc ) should be upgraded or designed with the Regional Economic Commission (RECs). Crashes on these roads in particular occur on the road environments which are suddenly changing the geometric design parameter. In this case, the Regional Economic Commission (RECs) should develop a design and guide for Trans-Africa highways and bridges. This guide shall contribute to building consistence roadways and bridges on regional corridor which have an impact on improving road users ‘safety substantially.

Alternatively, African countries shall be encouraged to incorporate best international practice in their national manual, especially for those high standard national and regional corridors as they experience high traffic volumes. This is because the number of road traffic crash varies with traffic volume. Road traffic crashes and the traffic volume have direct relationship even though their relationship is non-linear.
These countries should legally classify roads according to the functions and incorporate in the National road and bridge design manuals. Functional classification of roads is the process of grouping streets and highways according to the character of travel service they provide. The classification can serve road designs which must reflect the design norms and standards of their respective classification and intended functions. The design norms/criteria and standards should be taken from research outcome of the region or from best international practices which help to improve the safety of road users. The functional road classification allows each country to consider equitable provision of a safe and efficient road network through a systematic manner. Forgiving roadway design shall be developed and practiced in the region to reduce road user deaths and serious injuries. The national and transnational highways are functionally classified higher standard roads which experience high volume of traffic. As a result, safe road design criteria and standards are needed. In this respect, the Regional Economic Commission (RECs) can establish minimum criteria for the design and upgrading of regional roads corridor.

Another vital element for safer road is road safety audit at planning, detailed design and construction stages of national and regional roads (e.g. National and Trans-African Highways). Currently, the African Development Bank had published three road safety manuals which assist African countries to reduce the problems. These manuals are: Existing Roads: Proactive Approaches, Existing Roads: Reactive Approaches and New Roads and Schemes: Road Safety Audit. African counties are encouraged to use these manuals in safety evaluation of the new or existing roads, as they are well-thought manuals and practical.

The next useful method of road safety is road safety audit which is a formal procedure for independent assessment of the crash potential and likely safety performance of a specific design for a road or traffic scheme – either for the existing roads or that under construction. It should be a statutory requirement which could be supported by rules and regulations in each country. The audit is undertaken on new or existing highway improvement schemes at various stages. Specifically, road safety audit at planning, detail design, construction and opening stages to traffic should be done to improve road users’ safety. It is the most cost effective road safety remedial measures to intervene at planning and design stages. In general, the road safety audit should be concerned with determining interactions between road users leading to potential collision types or footway trips, rather than making sure that the scheme complies with design standard and specification. Therefore, each country should establish strong directive or legislation to make road safety audit as a mandatory practice on any road. The audit should be carried out by independent consultants who do not have a connection with the planning and design consultant. Nowadays, the practice in some member countries indicates that the road safety audit is conducted by the design consultant which is a wrong practice. On the contrary, the auditor should be a well trained and experienced engineer who is independent from the design team to give his/her opinion. However, road safety auditors and specialised technical personnel are scarce in the continent. This implies that the productions of the previously mentioned manuals are good opportunities for the Regional Economic Commissions (RECs). Training on these manuals should be given a priority to develop the skills of road safety audit, road safety inspection and hot spot identification methodology. Most universities in the region have not incorporated road safety audit in their curriculum. To start with, Regional Economic Commissions (RECs) may establish a link with one University from each state and conduct the training program for trainee trainers. This assists the continent to build the capacity of local professionals who will ultimately bring a change on current road planning, design and construction practice of the region.

Similarly, road safety inspection on existing roads is often carried out in developed countries to assure the safer road environment. The culture of inspecting existing roads may be applied in some African countries. Road Safety Inspection on existing national and regional road corridors in Africa shall be conducted periodically as
it assists to monitor and control the safety performance of these roads in the network. It allows the implementation of remedial measures before crashes occur. The inspection shall focus on the following tasks:

- crash analysis – crash map (black spot identification)
- analysis of the traffic conditions
- analysis of the constructional elements
- inspection – on-site visit
- meetings and interviews with national and regional highway maintenance unit and traffic police
- analysis of road surface (pavement rating - ruts, friction, …)
- analysis of road maintenance measures
- analysis of road environment

The inspections take the form of a Safety Analysis and will involve, as a minimum, all road assets including; but not limited to, roadways, pavements, walkways, cycle paths in cities or towns that the national and regional roads traverse, road furniture, signs, traffic signals or controls, road markings, crush barriers, and streetlights.

Moreover, implementation of road safety inspection (including International Road Assessment Program / iRAP / rating) is a vital strategy to reduce the number and the severity of crashes in the region. The focuses should be given on the major risk factors for vehicle occupants and pedestrians. As mentioned previously, some countries in Africa (e.g. Uganda, Ghana, Egypt, Ethiopia etc.) have already adopted iRAP protocol to rate the road segments. iRAP analytical protocols are highly advanced and standalone internationally as the best management tool for highways to identify infrastructure safety issues, target safety resources to the best effect, and monitor progress. Importantly, the protocols do not rely on years of (often inadequate) crash data to deliver safety star ratings (one to five) for different road users, and to develop a prioritised set of infrastructure and related safety works. They have been developed with the involvement of road authorities, and calibrated with real safety results, in high middle and low income countries.

Also, the identification of hot spot requires quality crash data records, particularly crash locations. The geo-referenced crash location enhances our ability to identify the causes of crashes related to road environment (e.g. road geometry, site characteristics and traffic condition on the spot). At least three years’ crash data is required to identify those areas which have high crash frequencies on all road national & regional corridors improvements. If possible, it is good to develop safety performance function to measure the safety performance of existing or future regional or national road of the continent. A safety performance function (SPF) is an equation used to predict the average number of crashes per year at a location as a function of exposure and, in some cases, roadway or intersection characteristics (e.g., number of lanes, traffic control, or median type). Otherwise, simple black spot identification methods could be used (e.g. frequency method, crash rate road segments or intersection or vehicle kilometres travelled per year etc.). The possible steps to be taken in identification of hot spot could be crash mapping, identification of high crash spots by implementing one on the previously mentioned methods, crash analysis and understand the causes and contributing factors, developed alternative courses of action, select remedial measures, implement engineering countermeasures and evaluate the performance of the road spot or section.

Managing traffic at a road construction site is an important part and keeping pedestrians and vehicles apart. The following actions will help keep pedestrians and vehicles apart:
• **Entrances and exits** - provide separate entry and exit gateways for pedestrians and vehicles,

• **Walkways** - provide firm, level, well-drained pedestrian walkways that take a direct route where possible,

• **Crossings** - where walkways cross roadways, provide a clearly signed and lit crossing point where drivers and pedestrians can see each other clearly,

• **Visibility** - make sure drivers driving out onto public roads can see both ways along the footway before they move on to it,

• **Obstructions** – do not block walkways so that pedestrians have to step onto the vehicle route,

• **Barriers** - think about installing a barrier between the roadway and walkway.

In addition to this, minimizing the vehicle moment at site will reduce the exposure to crashes.

### 2.2 Safer Road Users

In a traffic system, road user behaviour is one of the major factors that influences the occurrence of crashes. Many attempts were made in the West to influence road users’ behaviour to reduce crashes as well as congestions. Behavioural change strategies or interventions have brought some success on the current crash count reduction. Similarly, some work on road users’ behavioural change in Africa should be done as the strategy will be effective in influencing the road users’ behaviour. Limited research which was conducted earlier had identified road user behaviours such as overspending, drink-driving, neglect of seat belts and not wearing helmets as major risk factors to road traffic crashes in Africa.

Inappropriate or excessive speed among the risk factors identified is the foremost impediment to safe travel on the roads. Road traffic crashes might not be as such an issue when the travel speed of all vehicles is below 30km/hr. This implies that the risks of fatal or serious crashes can be avoided or will be negligible if vehicles are limiting their speeds. The probability of involving in crashes could be less than 10 per cent. In most cases, the travelling speed is higher in the countryside, although in cities as well as towns alike, it is common to observe vehicles moving at excessive speeds. Majority of drivers do not comply to set speed limits even if it is indicated on road posts. Base line study done by John Hopkins University in Addis Ababa suggested that 52 per cent of observed drivers navigated with over the speed limit. The non-compliance rate in this respect is very high. Other African countries have similar trends even though published studies are not available.

Moreover, the drivers’ choice of speed account for local and temporal conditions related to traffic and weather. However, drivers often adopt a speed that is inappropriate for the prevailing conditions. Speed choice depends on drivers' motives, attitudes, risk perception and risk acceptance. Other factors which influence the drives’ choice of travel speed are road conditions, vehicle characteristics, the weather and mix of traffic characteristics.

An increment of speed increases the likelihood of injury severity which is related to kinetic energy. Therefore, remedial actions should be taken to lower road crashes and injuries incurred due to speeding. There is no single solution to overcome excessive speeding, and number of solutions should be sought of. A good balance among road design, speed limit, and speed enforcement could be one solution to resolve the risk of being involved in crashes. Regional Economic Commissions (REC) should urge member countries to implement speed enforcement.
The following remedial measure could improve safety for all road users by reducing the incidence of speeding and inappropriately high speeds on national and regional road corridors. These are to:

- Set appropriate speed limits along the national roads and regional corridors in the region,
- Heighten driver awareness of speeding-related safety issues,
- Improve the effectiveness of speed enforcement efforts,
- Communicate appropriate speeds through use of traffic control devices,
- Ensure that roadway design and traffic control elements support appropriate and safe speeds.

Like excessive speeding, driving under the influence of alcohol has been proven as a main risk factor involving in road crashes in Africa, except in those countries where alcohol is prohibited. Actually, very few studies have documented the role of alcohol as a risk factor in motor vehicle crashes in the continent. Currently however, as income per person is rising in some African countries, alcohol consumption per head as well is expected to increase. To the contrary, there are no laws prohibiting drink-driving or there is only weak enforcement of the laws in most African countries. Moreover, penalties for drinking and driving are low in the continent which may need a revision of traffic regulation to align with enforcement. Research suggested that, at least Breathalyser testing should be in place to detect drink-driving as it is the most effective means of both enforcing legislation and deterring potential offenders. Measures should be taken to reduce drinking and -driving on national and regional road corridors of African countries. The measures can be strengthening the traffic regulation as well as underpinning remedial impaired driver programs and services in the driver licencing system. These include:

- Strengthening the traffic legislation
  - zero Blood Alcohol Concentration (BAC) level for professional drives and young drivers
  - Strength the penalties using pointing system. This need a good data system to record the penalties

- Enforcing impaired driver programs
  - Implement drinking and driving enforcement using Breathalyzers
  - Build the capacity or give training for the enforcement body
  - Increase the frequencies of enforcement activities of drink-driving (road blocking for drinking-driving enforcement)
  - Increase communication and information-sharing about drinking and driving enforcement with the society
  - Explore the need for tailored programs and services for younger drivers who are more vulnerable in drink and driving.
  - Target unlicensed drivers

Use of seat belt is often associated to the reduction of injury severity of the road users. Although the seatbelt law is in place in most countries, majority of the vehicles are not equipped with standard seatbelts. Particularly front and back seats for passengers are none existent in most vehicles. This is because the vehicles are very old and they were not fitted with standard seatbelts during production. This is more vivid on public transport.
vehicles like buses, mid-buses and minibuses. The compliance uses of seatbelt rate by drivers in some countries are high; however, car occupants who seats at the back rarely use seatbelts. In some countries, the seatbelt wearing compliance rate is substantial proportion of drivers as well as passengers (e.g. in South Africa).

In addition to speeding and drink and driving, child restraint compliance rate is low in the continent compared to high income countries. The developed countries experiences/best practice/ show that seatbelt and child restraints are vital aspects of vehicle transportation. Similarly, seatbelt usage and child restraint practices should be addressed in Africa to reduce injury severity in road traffic crashes.

Neglect or improper usage of helmet is the other risk factor that is rectified by many researchers. In this regard, the habit of wearing helmets in Africa is at an infant stage. Motorcycle users sustain the most serious injuries leading to disability and death. Wearing a standard and good quality helmet can significantly reduce the probability of death and the risk of serious injury. However, most motorcycle riders fail to wear to the standard and quality helmet. Surprisingly, motorcycle riders often use the helmets that are supposed to be used by construction workers with no clasps/fastening. According to the report from WHO (WHO, 2013a), most African countries fell under the category of comprehensive helmet law, but there is no known standard and the helms laws are not comprehensive. On the other hand, some countries such as South Africa, Ethiopia, and Madagascar have developed comprehensive helmet law and standard in their traffic legislation. In general, the status of helmet use in African countries can be concluded as very low. Motorcycle riders usually fail to obey and comply to set rules and regulations. Nevertheless, it is highly recommendable that comprehensive helmet laws and standards should be incorporated in each country’s traffic regulation and it has to be strictly enforced.

2.3 Safer Vehicles

Motorized vehicles in Africa accounted for 2% of the world vehicle population. However, it contributed for about 12% of road traffic deaths including pedestrians (WHO, 2015). Lack of set standards for domestically manufactured or imported vehicles have contributed to the rise of road traffic crashes in the continent. African countries imported used vehicles including commercial fleets. Used vehicles supplied to Africa typically do not undergo safety inspection and do not meet National or International standards of the exporting countries. For instance, in Ethiopia, imported second-hand cars account for 77%, out of which 48.2% of the cars are 5 to 10 years old, (Akloweg, Hayshi, & Kato 2011). Similarly, African Development Bank (2013) reported that almost all African counties make use of imported used cars and only 60% of the surveyed countries had vehicle standards. Although implementing the respective standard on used vehicles, where there is one, is a critical issue in most countries, in some countries the standards are totally non-existent.

Experience in developed countries has shown that vehicle standards are essential components for improving vehicle safety. Improvements in car design, car occupant protection and vehicle maintenance quality have contributed to road users’ safety in these countries. However, in Africa, the safe design of vehicles mostly is not given a due attention. This is because people in Africa are price sensitive and as a result they tend to procure those vehicles that are less fitted with safety features. For instance, among the registered vehicles in Africa the 2- and 3-wheelers constitute a significant number (Tulu, 2013b). But most of them do not have crashworthiness features to protect road users. Vehicle condition is usually very poor. Spare parts are not easily available or are expensive to procure in many countries in the continent and people tend to use inappropriately serviced and faulty vehicles. Furthermore, there is a problem of inappropriate use of the vehicles and overloading of all types of vehicles beyond their set capacities.
The low level of vehicle population ratio to the high demand for vehicles is another aspect of safety issue in many African countries. As indicated by many studies, road hazards resulted from overloading is one of the many causes of crashes. Thus, Africa requires strong strategy and directives on safer vehicles.

The safe vehicle strategy is to create a safe system for all African and reduce road trauma and injuries of road users. The management of safe vehicles may require safety standards for all motor vehicles and related safety fitting such as seat belts, and helmets for motor cycles and bicycles. Vehicle registrations including annual vehicle inspection as well as random roadside inspection for roadworthiness are important elements to keep vehicle standards and promote safe system approach to road safety. In addition, law enforcement needs to be strengthened to ensure compliance with international standards and good practices, including regulations related to import of vehicles.

Manufacturers and importers play a significant role in producing or importing vehicles designed and equipped with safety equipment installations. Advanced safety technology such as airbags, seatbelt, traction control, intelligent speed adaptation, electronic stability control and etc... have significantly contributed to the decline in deaths and injuries on the roads.

In general, road crashes can be reduced by:

- removing the old and less-safe vehicles from the road network,
- establishing vehicle standards map,
- ensuring maintenance of accepted standards,
- advising policy makers to improve the safety of vehicles such as: improved maintenance and enforcement, promotion of the retrofitting of certain safety devices,
- Encouraging citizens to import new vehicles which have safety features by reducing taxes levied on new vehicles. On the contrary, importation of second hand vehicles should be discouraged.

2.4 Post-crash Response

Post-crash Response is the fifth of the African Decade Action for road safety. Although avoiding road traffic should be the main target, severity reduction by improving post crashes is a key aspect of road safety. Most Citizens in Africa are not aware that many lives could be saved by improving post-crash responses. The objective of post-crash responses is to avoid and minimise preventable deaths and disability, limit the severity of the injury and the suffering caused by it; and simultaneously ensure the crash survivor’s best possible recovery and reintegration into society. However, in African countries, post-crash response is very poor as there are many constrains. Lack of appropriate first aid training to communities, lack of kits crash scene, emergency service ambulance, and lack of emergency service (e.g. physician, nurse, equipment, beds etc.) are some of the constrains to mention. To overcome the problem of post-crash response, policy makers have to focus basically on activities such as: a) development of pre-hospital care systems, b) development of hospital trauma care systems and evaluate the quality of the care, c) provision of early rehabilitation and support to injured patients and those bereaved by road traffic crashes, and minimize both physical and psychological trauma, d) encouragement of the establishment of appropriate road user insurance schemes, e) encouragement of a thorough investigation into the crash and the application of an effective legal response, f) provision and encouragement of incentives for employers to hire and retain people with disabilities and, g) encouragements of research and development into improving post-crash response.

The improvement of post-crash care can be delivered in African countries through the following actions:
• Ensure that first aid training to communities at grass root levels to assist in post-crash trauma is provided.
• Develop incident management system on all governmental structures which implies that National and Provincial Roads/ Regional level roads/
• Develop guidelines for hospital emergency trauma care to reduce the injury severity and prevent permanent disability that will happen on road users due to the lack of proper emergency care at hospitals.
• Avail for road crash funding to make health care centers accessible to post-crash care seekers and all the community. (For instance, in Ethiopia, there is third party insurance system and a certain portion of the premium paid by each vehicle owner is already allocated to post-crash care. Every citizen can get the service (e.g. emergency hospital trauma care systems) in both public as well as in private hospitals or health centers.)

Therefore, post-crash care should be taken seriously to save the lives of the people by organising on-site management, transporting victims to health facilities, ensuring emergency and trauma care service for the victims, and coordinating and financing stakeholders’ involved in post-crash services.

2.5 Road safety Management

2.5.1 Establishing Legally Mandated National Road Safety Agency

A National Road Safety Council needs to be established by law. The mandate of the Council is to advice Government on programs and initiatives for reducing road trauma in each country. It considers advice from evidence-based research, community consultation and from the main government agencies and other stakeholders who have a role in road safety. The mandate also includes promoting road safety in each country, to promote and provide financial support for research in the field of road safety.

The council should have at least the following function in Africa:

• Identify and recommend measures to improve the safety of the national and regional road corridors,
• Drawing up an integrated plan of action,
• Co-coordinating the work of all organizations involved,
• Identify and recommend measures to reduce deaths and injuries resulting from road crashes,
• Evaluate and monitor the effectiveness of these measures,
• Evaluate and monitor the safety of roads in the State,
• Feeding back information from the evaluations and amending the action plan as necessary,
• Make recommendations to Government on the budget to be allocated for safety work.

It is essential to have a road safety council that regulates the road traffic, because good road safety performance demands a multidisciplinary approach involving many stakeholders. The political commitment and willingness of high level decision makers to cooperate is very necessary to achieve the road users’ safety. It is, however,
difficult to achieve in practice with no clear attribution of responsibility for road safety results and lack of strong coordination among key stakeholders. Road traffic crashes are mostly preventable and change in road safety can be achieved if there is adequate road safety system that aims to reduce the number and the severity level of injuries.

The Council comprise of various institution, Ministry of infrastructure or equivalent (Chair), Police Commission, Ministry of Health, Ministry of Finance, Ministry of Justice, Ministry of Education, Ministry of Communication and Other relevant stakeholders (Road and Transport Authorities, Non-Governmental Association etc.). The Lead Agency usually takes responsibility for coordination within the government, both horizontally and vertically at national, province/regional and local levels; coordination of delivery partnerships between government partners and stakeholders, professional, nongovernmental, business sectors and parliamentary groups and committees; securing sustainable sources of annual funding and creating a rational framework for resource allocation; high level promotion of the road safety strategy across government and society; regular and ongoing monitoring and evaluation, and reporting to government; strategic leadership of research and knowledge transfer. The proposed organizational structure is given as follows (see Figure 5).

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**Figure 5. Organizational structure of National Road Safety**

Road safety roles and responsibilities: Varies organizations and stakeholders will play a major role in the success of this road safety strategy in African countries. The roles and responsibilities of the major institutes in a country are given in brief below:
**Ministry of infrastructure or equivalent:** responsible for developing and overseeing implementation of road safety strategies, and providing the necessary leadership and management functions required for all responsible organs to succeed in achieving the objectives of the strategy.

**Police Commission:** responsible for developing and implementing enforcement and compliance strategies which deter the general motor vehicle driving population from breaking key road safety laws.

**Ministry of Education:** Support the planning and implementation of projects which promote safe travel to and from educational institutions, including through the provision of complementary and reinforcing road safety curricula.

**Ministry of Health:** Support the planning and implementation of projects to improve the safety of road corridors, specifically in relation to the provision of better and quicker access to post-crash care and the promotion of road safety through community-based public health programs.

**Ministry of Finance:** generate road funds and makes them more sufficient to run and implement road safety strategy efficiently and effectively.

**Ministry of Justice:** administer justice, deliver public safety services and programs, lead emergency management and provide legal advice to Government.

**Road Authority or Agency:** responsible for providing the citizens of each country with a safe road infrastructure, which accommodates human error in its use, and is designed and managed with specific attention given to the safety needs of pedestrians.

**Transport Authority or agency:** Implementing and achieving compliance with national motor vehicle and driver regulations prepared by the Transport Authority, with specific attention given to removing access of unsafe vehicles and drivers from the road transport system. Regulating the safety of commercial freight and passenger transport operators, informing and educating operators of critical safety behavior expectations, and giving specific attention to ensuring that commercial licenses are not held by operators which do not adhere to critical safety laws.

**Other non-government or Agency:** initiate road safety activities which the public authorities have problems to address, due to various reasons. For example, access to private funding or receipt of various types of contributions from individuals and corporations.

The technical working groups will be needed to handle the operational tasks of the countries. The recommended minimum qualification of each technical lead is given below.

1. Technical working group lead for engineering
   - **Education**
     - BSc. in civil engineering or road and transport engineer or above
     - Special training in road safety Audit and crash investigation
   - **Specific experience**
     - Road safety engineer with at least two years’ experience of collision investigation and remedial measures.
     - taken part in ten road safety audits as team member
• General experience
  o at least two years’ experience in road design
  o at least ten years’ experience in road project

2. Technical working group lead for Enforcement
• Education
  o Diploma in Road Policing Operations
  o Minimum BSc. degree in law or above
• Specific experience
  o minimum four years’ experience in road policing
• General experience
  o at least six years’ experience in general traffic policing

3. Technical working group lead for Education and Communication
• Education
  o Minimum BA. degree in social marketing or related and above
  o Special training in social marketing and campaign
• Specific experience
  o minimum of two years’ experience in social marketing
• General experience
  o at least six years’ experience in general marketing and campaign experience

4. Technical working group lead for data and surveillance
• Education
  o Minimum BSc. degree in public health or above
  o Training in data analysis and management
• Specific experience
  o taken part in data and surveillance management for two years
• General experience
  o at least six years’ experience in general public health

2.5.2 Legislations
The road safety legislations of most countries have gaps which need to be assessed. The regional Economic Commission (RECS) could take the lead with the collaboration of International Institutes to assess and identify the gaps and propose standard traffic legislation. According to a current publication of WHO to strengthening road safety legislation (WHO, 2013), the main aim of the gap identification is to achieve:
• a clear picture of current laws and regulations in order to identify any gaps,
• that laws and regulations are not changed without a clear understanding of the country’s needs,
• support of stakeholders for any necessary changes to laws and regulations.

The legislations have to review:

• the driving licensing schemes,
• road traffic legislative and compliance systems associated with the design, construction and management of the road network,
• the recovery and rehabilitation of crash victims.

For instance, Ethiopian traffic legislations have been reviewed by international institutes and found that the current legislations in practice have many gaps which have not allowed the enforcing body to conduct drink and driving enforcement, speeding enforcement and other main risk factors. Therefore, RECs works its best to assist countries to adopt best International legislations (e.g. Western countries).

2.5.3 Road Safety Strategies

Even though a road safety strategy has been developed in the context of the continent, each member country shall formulate own strategy to each country’s context. Road safety strategy and action plan helps African countries to focus on major road safety issues. The Regional Economic Commission encourages member countries to formulate a high-quality national road safety strategy which can be seen as a road safety indicator. The strategy can make road safety as an issue of political agenda. A well-crafted road safety strategy and action plan can be a tool for responsible authorities to identify the most relevant road safety actions to focus their work efficiently and to assign the necessary resources. The road safety plan can also be a tool for accountability and transparency, communicating road safety priorities to the region. The strategy should give priority to improving safety performance to national and regional Trans-African highways with clear priorities, responsibilities and ambitious and feasible targets. The Regional Economic Commission shall step forward with this road safety strategy to play out its part in protecting the life and health of the citizens.

2.5.4 Road Safety Data Management System

Poor crash data quality obstructs the ability to accurately and comprehensively understand the crash problem. The crash data quality features are timeliness, accuracy, completeness, consistency, integration and accessibility. Evidence based road safety countermeasures demand quality crash database. This implies that good quality injury data are the platform for identifying the causes of crashes. However, crash data quality problems are major issues to identify the causes of crashes in road safety in African countries. The major problems of crash database are:

• **Missing injury severity data** - In most African countries, the problem of missing data relates to fatal and serious injuries, slight injuries as well as property damage. In contrast, in western countries the main concern is missing information on minor injuries and property damage.

• **Poor crash location information** - The crash location information is not described by Global Positioning System (GPS). For instance, in Ethiopia, crash location is indicated based on the permanent features that are available at the site. Sometimes, police use a kilometre post to describe the location which may be some distance from the exact crash site.
• **Data recording errors occur in several ways** - These include under or overestimation of injury, misclassification of injury due to negligence, mixing other trauma with road traffic injury in hospital records, and others.

• **Missing of important crash attributes** - Most countries do not have complete crash attributes in their databases.

The injury records found in police stations and hospitals contain a lot of discrepancies. This problem is particularly prevalent in the African countries where discrepancies and underreporting of crashes occur in many jurisdictions. One of the reasons is that people may be less willing to call the police due to the socioeconomic and cultural context of a society.

On the one hand, people with better income prefer not to stand in courts as it may take long time and cost in order to settle the case in the normal situation. As a result, they negotiate with a person/s involved in crashes without going through the formal regulatory channel. At the same time, some people in the region might have economic motives to get involved in crashes intentionally. They tend to insist on negotiating to get monetary compensation. These are people mostly with no regular income to fulfil their daily basic needs, and by making an intentional crash with motorized vehicle they will get some negotiated compensation.

The problem of underreporting crashes is an International issue; the magnitude however, is very much pronounced in African countries than the others. Another possible explanation is that police may not include some of the crashes due to negligence or overlooking them.

Investigation and critique of the quality of the crash data sources is vital in developing potential solutions for crashes. Data quality improvements are often linked to technological advancements and always linked to sound business practices. The measurement of data quality to detect and verify improvements can also be facilitated through technology, but often requires simple, low-cost methods for the RECs. Thus, the linking hospital and police road crash casualty records can provide insight into the completeness of police data, and brings together more detailed information on crash circumstances and medical outcomes for further research. As a result, underreporting and missing data will be minimized.

Misclassification and overestimation of injury severity are other problems in crash data quality. In the continent, although the definition of each level of severity is standardized, a considerable quantity of injury severity data might be lost due to lack of appropriate training and negligence. Enhancing the capacity of data encoders in police and hospital departments should be the biggest tasks needing the attention of policy makers in each African country.

The above mentioned measures improve data quality and provide a basis for effective safety countermeasures and reductions in the loss of life and property in highway crashes. This is because the quality of crash data is important to all transportation related fields as it allows professionals to make improvements in order to save lives, which supports one of the biggest goals set in the RECs.

### 2.6 How to Finance Road Safety in Africa

There are no serious actions to be taken without securing a stable financing of road safety. Various road safety interventions to improve road users’ safety in most African countries have failed due to the lack of sustainable funding. Identification of appropriate and sustainable financing of road safety is key element for all road safety action plans. Road safety interventions are one of the key areas of public investment which is certainly the responsibility of government. Public sector funding for road safety in Africa is very restricted due to the other developmental issues in the continent. Most of road safety activities are funded by the public sector, although
the private sector may also fund some road safety activities. The current road safety funding is based on the commercialization concept of road users. This concept is more and more acceptable around the world. This implies that road users should finance road safety measures since they are the ones who cause most of the road crashes and suffer from its consequences.

For instance, in the affluent countries like Sweden, road safety is funded by government and, where the general revenue is then distributed to the lead agency. Many Asian counties (e.g. India, Nepal, Pakistan, Sri Lanka etc) adopted road funds to finance road safety sustainably. Similarly, road safety in Africa is mostly funded by the government. Government budget (direct investment), driver licensing fees, and road fund charges from fuel are the most common source of funding for road safety of the continent. Other funding opportunities are available from International Institutes and which however is very competitive (e.g. UN road safety fund, Global Road Safety Facility (GRSF)-World Bank, Global Road Safety Partnership etc...). Experience of other countries around the world indicated that funding for road safety comes from taxes, service fees and fines imposed on road users. In addition to these sources of funding, the REC motivates member states to implement road user charge which will be used for financing road safety on National and Transnational African highways. In addition, the RECs may find funding from International organizations for improving safety on these highways.

3 Road Safety Direction for Africa

Institutional capacity is the major concern in low and middle income countries. Funding road safety and building capacity need a greater emphasis to develop the institutional capacity. In respect with this, African countries have to review road traffic laws and regulations comprehensively and ensure that the laws are well enforced and attained. The countries have to develop management and investment frameworks to overcome institutional capacity barriers and pave the way for the successful implementation of road safety. Skill upgrading, procedural improvements and organizational strength of the leading agency in particular require working on the institutional capacity development to bring efficiency and effectiveness.

Similarly, knowledge transfer from the industrialized countries is another good opportunity to build the capacity of local professionals. Developed countries have accomplished considerable work in road safety for years. Research findings and experiences they have built will assist to improve the road safety issues in Africa. The RECs can arrange for knowledge transfer programs with developed countries which might assist to achieve a quick and proven safety results in high-risk corridors among national and regional highways. Bench marks for safety performances will be set to measure success of the program to the high risk road segments from Trans Africa highways and national road networks. The focusing on high risk road segments and/or intersections working with experienced professionals is effective which underpins the leadership and coordination of the tasks during its implementation and give an exposure to local experts.

The safety of vulnerable road users is the main road safety issues in cities of Africa. Particularly, pedestrians have encountered the highest rates of death and serious injuries, and it is an urgent need to increase the efforts and to take countermeasures aimed at pedestrian safety. Motorcycle usage must be given focus by policy makers so that to tackle the problems and improve motorcycle riders’ safety. Helmet wearing should be encouraged and the rules should be strictly enforced as it largely contributes to the reduction of road traffic trauma. As studies have identified, the main risk factor around the world and the direction of road safety in Africa should be focused on these risk factors which are related to vulnerable road users. In addition, main paved roads should be given a priority intervention as most road traffic trauma is clustered on paved roads. This implies to those roads (national and Trans Africa highways. These high traffic volume roads are major road safety concerns and need to be focused addressed accordingly. In these regards, the road safety directions
should focus on implementing road safety strategy with clear priorities, responsibilities and feasible targets on the followings.

- **Safe system principles** – that is, the need to accommodate/forgiving human error in the use of the national and Trans-African road corridors, and/or protect users from crash forces which may result in death or serious injury

- **Speeding** is the main cause of road crashes for car occupants and vulnerable road users. The implementation of safe speed is unquestionable. Speed limit for each road segments is necessary and road department/authority should set safe speed limits. Evaluation of the performance of speed limits must be done with some interval time.

- **Traffic calming measures** that reduce vehicle speeds or allow safer crossings – integrate proven measures such as speed humps, platforms, refuge islands, and other street designs that can underpin safety

- **Destructing driving**, particularly mobile usage while driving needs to enforce using technology on national and Trans African highways.

- The other issues in destructing driving are related to fatigue on professional drivers. This may require limiting working hours per day and per week for these drivers and need to establish rest areas along these highways with reasonable intervals.

- **Enforcement of impaired driving** is not a crime of driving a motor vehicle in most African countries. The provision of traffic regulation on drinking-driving are very weak and we should look for a regulation which is compatible with the international practices. The equipment for detecting drinking-driving enforcement should be sufficiently available.

- **Focus** should be given on the provision of pedestrian facilities since walking mode of transportation constitute the major share in all modes of the transportation.

- **Enhancing visibility of pedestrians** on cross walks by providing street lightings typically to protect pedestrians is crucial to reduce the exposure of pedestrian for crashes

- **Encourage pedestrians** to strictly follow the road traffic rules, particularly when crossing the road and pedestrians and motorcycle riders’ safety must be given priority.
4 References


17.2 Air Quality Management in National and Trans–African Road Corridors

By Getu Segne

Table of Contents

Abbreviations................................................................. 2
1 An Overview of the Effects of Air Pollution in Road Environment.......................... 3
2 Challenges in Road Transport Pollution in Africa .................................................... 5
   2.1 Traffic Volume, Urbanization and Air Quality on African Major Corridors........ 6
   2.2 Effects of Road Traffic Air Pollutants ............................................................... 7
   2.3 Air Quality Management Challenge in Africa ............................................... 8
   2.4 Factors that Affect Road Traffic Air Pollution in Africa .................................. 10
3 Criteria for Air Quality Assessment in Road Environment of Africa ..................... 10
   3.1 Criteria for Air Quality Management ............................................................ 11
   3.2 Estimation of Road Traffic Emission ............................................................... 12
4 African Road Traffic Air Quality Management Strategy ...................................... 13
   4.1 Purpose of the Outline of the Strategy ............................................................ 14
   4.2 The Actions to be taken for Improving Air Quality at National Roads and Trans-
        Africa Highway Corridors ............................................................................. 14
5 References......................................................................................... 16

## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>Carbon Dioxide</td>
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<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Economic Commissions</td>
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<td>WHO</td>
<td>World Health Organization</td>
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1 An Overview of the Effects of Air Pollution in Road Environment

Modern transport is vital for development, allowing the movement of goods and people from one place to the other and enabling citizens to access key resources and services. However, particularly in cities and high volume road corridors, where vehicles are widely used, they are a major source of air pollution because of the gas emitted from burnt out fuel. The pollutants from the vehicles deteriorate the quality of the air.

Air quality may be defined as a measure of the purity of the atmosphere, in terms of the quantity of solid, liquid or gaseous pollutants. Motor vehicles among the others are known to cause these pollutants. Polluted air in turn affects the environment and damages human health. The health impacts of air on human beings could be short term or lasting. The short term health impacts for instance include irritation, nuisance, obscured vision (caused due to soiling of surfaces, from deposited dust or increased corrosion rates) and etc. The lasting damages could be severe and can also cause death.

According to World Health Organization (WHO, 2016), for instance an estimated 12.6 million people died as a result of living or working in an unhealthy environment in 2012 alone.; That is nearly 1 in 4 of the total global deaths. Out of the deaths mentioned, an estimated 1.34 million premature deaths were caused due to outdoor air pollution, and they were mostly related to environmental pollution resulting from the use of motorized vehicles (Rahman, 2016). This is a serious health concern for each country. Motor vehicles using fossil oil or to some extent using bio-fuel are the prominent sources of air pollution emanating from transportation activities.

Basically, there are four types of air pollutants. These include:

a. mobile sources: for example, motorized traffic (transport)

b. stationary sources: for example, industry

c. area sources: for example agricultural areas, cities, charcoal and wood burning fireplaces, and

 d. natural sources: for example, windblown dust, bush and wildfires, volcanic eruption…

The negative effects of these pollutants can be categorized as local and that with wider effects on the surroundings. The local effects include traffic noise, deterioration of local air quality, water pollution and destruction on the overall flora and fauna inhabitants. On the other hand, the wider effects of vehicle emission include the thinning of the Ozone layer, climate change and global warming.

The transportation sector is a major source of air pollution as it is a major user of energy, and burns most of the world's petroleum. For instance, in 2010, the transport sector consumed nearly 2,200 million tons of oil which constituted to nearly 19% of the global supply of energy (World Economic Forum, 2011). As depicted in Figure 1 below nearly 96 per cent of the energy used by the transportation sector came from fossil oil, and biofuel, electricity and natural gases constitute only a smaller proportion. The transport sector contributed about 20-27 per cent of outdoor pollutants
which is significant. Sometimes, the contribution of transportation for air pollutants may go 70 to 90 per cent in some developed countries. This indicates how transport air pollutants are damaging our environment seriously.

Figure 1. 2010 transport energy by source and by mode
Source: WEF, Repowering Transport, 2011

This paper focuses on the mobile or transportation sources, particularly road traffic sources of pollutants in Africa. Attention will be given to regional roads such as Lagos–Mombasa Highway, Cairo –Cape town, Algeria-Lagos, Tripoli-Windhoek, Cairo-Gaborone, Dakar-N’Djamena, Dakar -Lagos and Beira-Lobito highways and national roads of each member country.

Air pollution is of particular concern in congested city streets, national and trans-African road corridors which have high traffic volumes and high composition of heavy trucks and other low speed vehicles. Pollutants are often concentrated along and the nearby road environment compared to those areas located farther from the road. As a result, inhabitants who live nearer to the roads are more exposed to pollutants than those living faraway.

Air pollution which is related to transportation is the concentration of air pollutants in μg/m³ (or ppm or ppb for gases). The following are the major pollutants from motor vehicles:

- Carbon monoxide (CO)
- Nitrogen dioxide (NO₂)
- Sulfur dioxide (SO₂)
- Hydrocarbons (often represented by benzene C₆H₆)
- Ozone (O₃)
- Respirable particulates (PM10, particulate matter less than 10 microns (μm) in equivalent aerodynamic diameter), and
• Fine particulates (PM$_{2.5}$)

Figure 2: Road Transport’s percentage contribution to air pollution

Source: Friends of earth for people, 1999

The generation of traffic air pollution depends on many factors. These factors may be associated to traffic characteristics, road environment, vehicle and road user behavior. The design, construction and management of roads, and other related facilities as well as the design and regulation of vehicles can affect the environment to varying degrees. Furthermore, low quality fossil fuel poses additional issues on air pollution in the continent.

Vehicle engines produce air pollutants that raise risk to human health. Although all the vehicles can emit particles into the air, there are compulsory fittings and antipollution devices which reduce pollution. However, most of the low income and middle income countries do not use these fittings. The vehicles in these countries are old and the countries do not have a control on vehicle specification. Most of these countries imported used vehicles from the rich countries. Locally produced or assembled vehicles as well do not meet the international standards.

2 Challenges in Road Transport Pollution in Africa

Air pollution from road traffic is a key issue in Africa and causes more annual deaths than road crashes. According to recent estimates, about 50,000 people prematurely die in Africa every year due
to exposure to outdoor air pollution (Sadeq, 2012). Although car ownership is still very low, the annual growth rate of vehicle population became two-digit in most of the African countries. As Africa rarely produces its own vehicles, most of the vehicles are imported ones. Unfortunately, again, most of these imported vehicles are used ones which already had given services for over 5 years in the affluent countries. As a result of the emission from these old vehicles which are unregulated by emission standards, most African’s cities are becoming increasingly choked with polluted air.

Air pollutants have significantly grown due to the increasing activities in key social and economic sector of Africa. Air pollution becomes growing problem in the continent. Unwise consumption and production of energy source have extensively caused air pollution. Figure 3 shows the contribution of carbon dioxide emission in Africa by some member country. Air emissions are a growing nuisance from Africa's growing industry and transportation. To cite some example, South Africa emitted 544.3 million metric tons of carbon dioxide from various energy usages per year. Similarly, Moroccan industry consumes one million tons of fossil fuel consumption per year and produces two million tons of CO2.

Air pollution is not currently seen as a serious problem due to the fact that there is inadequate data on the extent of the impact of air pollution to inform the policy makers in Africa. However, the limited data available on air quality in the continent show that air pollution issues are becoming frequent across the region. For instance, the urban air pollution problem is growing as economic development drive increases of fossil fuels transportation in major trans-African corridors and urban streets. Even if Africa possesses 2% of the total world vehicle population which is about 1.2 million, it is expected as the motor vehicle fleet will increase significantly.

![Carbon Dioxide Emissions in Africa, 2002](image)

**Figure 3: Carbon Dioxide Emission in Africa by country**

### 2.1 Traffic Volume, Urbanization and Air Quality on African Major Corridors

Air quality on high traffic volume corridor is largely influenced by traffic volume that caters on the road environment. Although African countries have lower vehicle per capita than their counterparts
in the developed world, they suffer from worse air pollution, and crashes than cities and high traffic volume road than the latter.

It is becoming clear that the pattern of economic growth we are adopting in the African countries is increasingly associated with environmental pollution due to the growth of vehicle population on the major corridors of the continents. This transport crisis also raises the human death in the continent. Motor vehicle emissions are no regulated yet they contribute immensely to the pollution of the environment. On the other hand, urbanization is adverse effects on the environment due to the creation of condensed and connected city.

2.2 Effects of Road Traffic Air Pollutants

As mentioned previously, motorized vehicles are the main sources of pollution in the form of gas and particulate matters emissions that affects air quality causing damage to human health. Toxic air pollutants are associated with cancer, cardiovascular, respiratory and neurological diseases. Carbon monoxide (CO) when inhaled reduces the availability of oxygen and can be extremely harmful. Nitrogen dioxide (NO2) emitted from transportation sources reduce lung function, affects the respiratory immune system and increases the risk of respiratory problems. The emissions of Sulfur dioxide (SO2) and nitrogen oxides (NOx) in the atmosphere form various acidic compounds that when mixed in cloud water creates acid rain.

Acid precipitation has detrimental effects on the built environment, reduces agricultural crop yields and causes forest decline. Smog is a mixture of solid and liquid fog and smoke particles formed through the accumulation of carbon monoxide, ozone, hydrocarbons, volatile organic compounds, nitrogen oxides, sulfur oxide, water, particulates, and other chemical pollutants. The reduction of visibility caused by smog has a number of adverse impacts on the quality of life and the attractiveness of tourist sites. Particulate emissions in the form of dust emanating from vehicle exhaust as well as from non-exhaust sources such as vehicle and road abrasion have an impact on air quality.

The other aspect of air pollution comes from motorized traffic noise which impairs the quality of life. Basically, noise is an undesirable sound. Long term exposure to noise levels above 75 decibels (dB) seriously hampers hearing and affects human physical and psychological wellbeing. Noise emanating from the movement of transport vehicles and the operations of ports, airports and railroads affects human health, through an increase in the risk of cardiovascular diseases. Ambient noise is a frequent result of road transportation in urban areas, which is the cumulative outcome of all the noise generated by vehicles.

In the long run, road traffic emissions of carbon dioxide and other long-lived greenhouse gases that build up in the atmosphere endanger the health and welfare of current and future generations by causing climate change and ocean acidification. Long-lived greenhouse gases, which trap heat in the atmosphere, include carbon dioxide, methane, nitrous oxide, and fluorinated gases. The risks to public health and the environment from climate change are substantial and far-reaching. Scientists warn that carbon pollution and resulting climate change are expected to lead to more intense hurricanes and storms, heavier and more frequent flooding, increased drought, and more severe wildfires - events that can cause deaths, injuries, and billions of dollars of damage to property and the nation’s
infrastructure. Carbon dioxide and other greenhouse gas pollution leads to more frequent and intense heat waves that increase mortality, especially among the poor and elderly.

2.3 Air Quality Management Challenge in Africa

Numerous serious air quality management challenges exist in many African countries. The identification of the problems of air quality is very complex and need the participation of the stakeholders. Figure 4 below shows the challenges for air quality management and its constraints.

Study shows that the concentration of a particular pollutant at a given location is related to its rate of generation, the motions of the air into which it is emitted and the physical and chemical processes that occur as it travels from source to receptor. Generation refers to the creation of air pollutants by a source. Traffic air pollutant emissions are the aggregation of the emissions from individual vehicles in the traffic stream. Traffic emissions are generally modeled as a line source. Point sources are a more appropriate representation of emissions from fixed plant such as construction equipment or tunnel ventilation stacks.

Vehicle composition on City Street, national road and Trans-Africa road corridors also vary in degree. The emission level of pollutant is more severe on those roads which have a high traffic volume, composition of heavy truck. Therefore, actions to improve air quality need to take into account the local composition to ensure that targeted measures are implemented. Moreover, the driver behavior, old vehicle and vehicle use of fuel, composition of traffic volume and other factors need to address the problem and bring change in Africa.
Most African countries have established a limit standard for air quality. Strict emission and fuel quality standards are not in place in most countries in the continent. Some African countries have shown a progress in producing gasoline specification in 2013 (see Table 1). For instance, importation of old second hand vehicles using fuels with high Sulfur and lead levels result in increasing air pollutant emissions. Worsening air quality in Africa is a cause for concern. Vehicle exhaust emissions regulations and standards for on-road and non-road vehicles and engines, and related are not enforced.

<table>
<thead>
<tr>
<th>Country</th>
<th>Specification</th>
<th>EAC Gasoline adopted</th>
<th>150ppm Sulphur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanzania</td>
<td>EAC Gasoline adopted</td>
<td>3% Benzene</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>EAC Gasoil adopted</td>
<td>50ppm Sulphur</td>
<td></td>
</tr>
<tr>
<td>Côte d’Ivoire:</td>
<td>Gasoil</td>
<td>3500ppm Sulphur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gasoline 5% Benzene</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm Sulphur</td>
<td></td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Gasoline</td>
<td>2% Benzene</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm Sulphur</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>Lead-free status awaiting confirmation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sulphur levels in gasoline &amp; gasoil to be reduced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>New specifications announced, full adoption pending</td>
<td>Gasoil – 3000ppm S</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gasoline – 1000ppm S; 1.5% Benzene</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>Cleaner Fuels 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gasoline &amp; gasoil:</td>
<td>10ppm S by 2017 delayed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gasoline:</td>
<td>lower benzene &amp; aromatics by 2017 delayed</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: African Gasoline Specification tightening in 2013

Lead present in gasoline is a cumulative toxin and can damage human health. In the past, most of the countries were using leaded gasoline. However, recently, most African countries have made a total transition not to use leaded gasoline in their transportation sector. On the other hand, some countries in the region are still using leaded gasoline. In some east African countries, leaded gasoline contains in the range of 0.4- 0.8 g/l. The skyrocket growing second hand imported vehicles and poor road networks are sources of traffic congestion in most African cities with impacts on fuel wastage and air pollution.

Each country has the opportunity to plan differently to tackle these problems. Thus, the environmental, economic and social costs of air pollution and their impact on sustainable development could be reduced. The local level air pollutants should be given much focus to improve the current air quality problem. It would be good that the regional economic communities in Africa should involve in the air quality management scheme. Currently, the West and Central Africa regional framework agreement on air pollution (Abidjan Agreement-2009) is one of the good examples. The aim of the agreement is to better air quality for the citizens in the region.
2.4 Factors that Affect Road Traffic Air Pollution in Africa

The composition and concentration levels of the generation of traffic air pollutants depends on the following principal factors. These include:

- Traffic volume,
- Average traffic speed,
- Composition of heavy vehicle in traffic volume,
- Road grade (gradient),
- Level of service,
- Average age of vehicle population,
- Individual vehicle emission,
- The fuel system
- The braking system, and Materials from the road surface disturbed by the wheels and by air movement around the vehicle.
- Driver behavior and vehicle operating conditions (including Air conditioner use, Braking and acceleration patterns, Gear operations,)
- Emission reduction technology
- Maintenance
- Ageing
- Fuel quality, and
- Ambient temperature.

The movement and dispersion of air pollutants are influenced by a number of factors including:

- Road configuration (whether the road layout is at grade, depressed or elevated)
- Distance between the source and reception point
- Meteorological conditions (primarily wind speed, wind direction and atmospheric stability)
- Type of intervening ground cover between source and reception point (surface roughness affects the wind speed profile and the potential for entrainment of particles), and
- The existence of natural or artificial obstructions.

3 Criteria for Air Quality Assessment in Road Environment of Africa

African national and Trans-African highways corridors air quality performance criteria can be developed to reduce pollution and improve public health of African citizens. Air quality criteria give guidance on the assessment of the impact that road projects may have on the local air environment.
The assessment includes local air quality and emissions of pollutants (e.g. CO, NO₂, SO₂, C₆H₆, O₃, PM10, PM₂.₅) including carbon dioxide (CO₂). Road transportation sectors share a significant portion of outdoor emission of air pollutants, even though most pollutants emitted by motorized vehicles are also contributed by small, medium and large scale industries as well as commercial and domestic activities. Where appropriate, this advice may be applied to existing roads. The categories of road projects are:

- new roads
- upgrade or rehabilitate of an existing road, or
- existing road with no road works.

The criteria can be advisory, flexible or fixed. Each of the options has its own advantages and disadvantages. However, the fixed criteria approach has been employed on a new road or existing roads at African national and Trans-African highways corridors.

National and Trans-African highways corridors planning should target to achieve the specification indicated at existing or proposed sensitive locations at a distance of 20 meters or greater from the edge of the nearest traffic lane.

### 3.1 Criteria for Air Quality Management

Assessment of the impact of high levels of air pollutants should take into account the full circumstances of the exposure. Short term high air pollutant exposure will normally be acceptable during construction since there are often limited construction periods when compared to the operation phase impact of the roads. A summary of air pollutant guideline levels that should not be exceeded at national roads and Trans-African highways corridors for the criteria pollutants identified previously is given in Table 2. The criteria are the new and primarily dimension for air quality management in the continent. An appropriate level of assessment should be undertaken to reflect the potential for a project to cause adverse environmental consequences. Not all national roads and Trans-African highways corridors projects will be subject to the same level of assessment in order to meet the requirements of the relevant legislation or guidance. For projects that are likely to have an adverse effect on air quality in a sensitive area, a detailed assessment is likely to be required early on in the assessment process so that the results can feed into the scheme design.

<table>
<thead>
<tr>
<th>Air Quality Indicator</th>
<th>Air Quality Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>micrograms per m³ (except where noted)</td>
</tr>
<tr>
<td>Nitrogen dioxide</td>
<td>40 µg/m³</td>
</tr>
<tr>
<td></td>
<td>200 µg/m³</td>
</tr>
<tr>
<td>Sulfur dioxide</td>
<td>20 µg/m³</td>
</tr>
<tr>
<td></td>
<td>500 µg/m³</td>
</tr>
<tr>
<td>Particles (as PM10)</td>
<td>20 µg/m³</td>
</tr>
<tr>
<td></td>
<td>50 µg/m³</td>
</tr>
<tr>
<td>Particles (as PM2.5)</td>
<td>10 µg/m³ (annual mean)</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td>25 µg/m³ (24-hour mean)</td>
</tr>
<tr>
<td>Insoluble dust deposition</td>
<td>4 g/m²/month * (construction) (1 month)</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>11,000 µg/m³* (8-hour mean)</td>
</tr>
<tr>
<td>Benzene</td>
<td>10 µg/m³* (annual mean)</td>
</tr>
</tbody>
</table>

Table 2: Criteria air pollutant guideline levels

Sources: WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide (WHO, 2005)
*Manual Road Traffic Air Quality Management, State of Queensland (Department of Transport and Main Roads) 2014

3.2 Estimation of Road Traffic Emission

The estimation of road traffic emission is done in various methods. Traffic volume provides information on the overall source input. The fleet mix indicates the role of vehicle type on near-road air quality. For instance, emissions can be quite different for locations where light-duty passenger vehicles primarily burning gasoline are used than where heavy-duty trucks primarily burning diesel are used. Speed provides an indication of the type of operation on the highway when compared to traffic volumes. For example, low speeds with higher traffic volumes often indicate road congestion; while high speeds with lower volumes suggest relatively little congestion.

Most efforts to estimate transportation emissions fall into the following primary categories of methods:

1. Fuel-based methods;
2. Vehicle kilometer travel (VMT)-based methods;
3. Alternative GHG estimation approaches; and
4. Specific transportation strategy analysis methods.

Each method serves certain needs better than the others and has its own strengths and weaknesses in application, due to data requirements, outputs produced, and sensitivity to different factors. Fuel-based inventories and forecasts are typically best when fuel sales data are available, while VKT-based methodologies may be used at multiple levels if the Annual Average Daily Traffic (AADT) data is available. Each type of method can typically be applied at different levels of sophistication, based on the amount and quality of data available and the purpose and needs of the analysis. Thus, RECs can select appropriate methods to measure the magnitude of air pollutants from road transport. Moreover, there are number of empirical methods which may suite the current and future demands of the continent. This may need further studies to develop a working manual for practitioners and professionals.
4 African Road Traffic Air Quality Management Strategy

In recent years, Africa has experienced an increase in population and development. This has caused a substantial increase in traffic volumes and a subsequent increase in vehicle air pollutant emissions. Trans-Africa highways and national roads are a significant source of air pollutants in urban as well as rural areas. The Regional Economic Commissions (RECs) Road Traffic air quality management strategy shall align with the requirement of international practices or WHO standards that enhance the quality of lives of the continent.

The strategy provides a means for the region to implement the recommendations given in section 3 and 5 of the directives which assists to address air quality issues on national roads and Trans-Africa road corridors. Each country in the continent quantifies the current and future air quality adjacent to national roads and Trans-Africa road corridors by applying a suitable predication methodology. The existing and future roadside air quality levels are to be representative of current and future road traffic volume on upgrading or existing roads of the national and trans-Africa corridors.

The main outcome of the air quality management strategy is to identify the pollution risk level which helps to prioritize air quality management that the detail assessment and mitigation measures will be carried out whenever it is required. The main criteria of the air quality management are indicated in section 3 of this report. The action plan for each member country should replicate these priorities. The implementation of these priorities may be subject to social, cultural, technical, works priority and considerations.

The countermeasures for improving air quality should consider the followings:

- traffic composition and volumes
- vehicle speeds
- road gradients
- congestion
- air movement and dispersion conditions
- predicted air quality
- receptors relative to each road link, and
- development approval conditions.

The crucial factors determining these priorities will be the forecasted air quality levels and the number of affected sensitive receptors. As part of the strategy, required data will be presented on action plans for each corridor or road segment of national and Trans-Africa highways which show the land uses, forecasted pollutant levels, the spot or road segment that any air quality remedial measures and any other related consideration which will be taken into account for. The strategy should be reviewed and updated based on the most prevailing research findings and international best practices at least every five years.
4.1 Purpose of the Outline of the Strategy

The main objectives of road traffic air quality strategy are:

- identifying likely road traffic air quality impacted on national roads and trans-national highway corridors with respect to the current and projected road traffic conditions.
- providing an estimate of a number of residents that are likely to be affected within the influence area of roads which exceeded the level of air pollutants from preset criteria indicated in section 3 on national roads and trans-national highways.
- assisting member countries in the planning of future upgrading of existing national roads and trans-national highways.
- proposing possible air quality management remedial measures and estimate the cost for the measures that will achieve the criteria levels stated in section 3.

4.2 The Actions to be taken for Improving Air Quality at National Roads and Trans-Africa Highway Corridors

The main solutions for reducing air pollution from road transport are given below. The recommendations are grouped in terms of clean fuels, cleaner vehicle and good urban planning (Lusaka Agreement, 2008).

a. Cleaner Fuels:

- Enact regulations to reduce sulfur levels in fuels to 500 ppm (parts per million) as an intermediate step for countries that import refined fuel.
- Promote the harmonization of fuel standards.
- Complete the phase out of leaded gasoline; and phase out the use of other harmful metallic additives.
- Enforce regulations against procurement, sale and use of fuels not meeting current fuel specifications.
- Enact regulations to reduce sulfur levels in fuels to 50 ppm for both refining and importing countries.
- Carry out scientific assessments of energy economics, environmental and socio-economic consequences before shifting to significant use of bio-fuels.

b. Cleaner Vehicles:

- Enact regulations to require that all used vehicles imported into the region should be equipped with a functional catalytic converter.
• Enact regulations to require that all new vehicles imported into or manufactured in the region should meet a regionally agreed minimum emissions standard.

• Enact regulations to restrict the age of vehicles imported into the region to a maximum of 10 years.

• Enact regulations for vehicle emissions testing, maintenance and inspection to ensure that vehicles comply with the agreed emissions standards.

• Implement cleaner vehicle technologies, for example compressed natural gas or diesel retrofits, in large fleets.

• Enact regulations to require that all diesel powered on-highway trucks and buses that are more than 10 years old are equipped with diesel retrofit devices.

• Require that vehicles crossing international borders for goods or passenger conveyance comply with these regional emission standards.

c. Urban planning:

• Support land-use planning policies for sustainable mobility and environment.

• Promote and give priority to provide facilities for non-motorized transport or design roads for people (pedestrians, cyclist etc.) and provide public spaces

• Plan for and promote safe, attractive and affordable public and non-motorized transport that is interconnected.

• Allocate an equitable share of road development funds and investments for non-motorized transport.

• Consider controlling passenger car use through appropriate measures like road pricing, congestion charging and parking management.

Moreover, the RECs should establish an operational manual on road traffic air quality management which assists practitioners and professional engineers to deal with air quality management. As mentioned previously, measuring road traffic air pollutants at new road or an upgrade of an existing road, or an existing road with no road works needs a sound methodology which allows standardizing the whole stories of transport air quality. The RECs can use the Manual Road Traffic Air Quality Management of State of Queensland (Department of Transport and Main Roads) 2014, Australia as bench mark to develop Africa’s own manual which will be properly articulated to African context.
5 References


# Module 18: Aspect of Trade & Transport Facilitation: The Example of West Africa

By Jean Acri, NTU

## Table of Content

1. Regional instruments on trade and transport facilitation
   1.1 Institutional Aspects
   1.2 Regional instruments designed for trade and transport facilitation
2. Lack of regional consolidated vision on trade and transport facilitation in the global context of development policies
   2.1 Lack of transversal vision for Trade and Transport facilitation
   2.2 RECs and the implementation of the WTO Agreement on Trade Facilitation (ATF)
      2.2.1 RECs and the WTO ATF
      2.2.2 A typical example of the proliferation of uncoordinated Single Window systems
      2.2.3 Establishment of “One Stop Border Posts”
      2.2.4 Dry Ports
3. National Development strategies and policies
4. Low implementation of regional instruments
   4.1 Status
   4.2 Main obstacles and possible way forward
5. Bilateral experience: the way forward?
   5.1 Bilateral road transport agreements
   5.2 The experience of the bilateral transport relations between Burkina Faso and Ivory Coast
   5.3 Bilateral implementation of the TRIE
6. Recommendations for moving up trade and transport facilitation on the political agenda
   6.1 Link trade facilitation and transport facilitation
   6.2 Define a Regional vision on trade and transport facilitation
6.3 Use the bilateral context to implement the regional instruments ................................. 21
6.4 Adjust some regional instruments.......................................................................................... 21
6.5 Adopt regional best recommended practices for developing Single windows .......... 22
6.6 Review the UEMOA Regulation N°15/2009/CM/UEMOA, 17 December 2009 relating to the legal status of joint borders control post............................................................... 22
6.7 Adopt regional guidelines for the establishment of dry ports along the main corridors ............................................................................................................................................. 22

7 Annexes ...................................................................................................................................... 23
1 Regional instruments on trade and transport facilitation

1.1 Institutional Aspects

The founding treaties of both ECOWAS and UEMOA identify trade facilitation and transport services development as key priorities to achieve regional integration.

However, trade facilitation and transport development are dealt with separately in the founding treaties of both RECs and are placed under the responsibility of different department in both RECs’ Commissions.

Within the UEMOA Commission, two departments are involved in trade facilitation issues: The Department in charge of economic policies (Département des politiques économiques et fiscalité intérieure); and the Department in charge of Regional Market, Trade, Competition and cooperation (Département du marché régional, du commerce, de la concurrence et de la coopération). Transport is dealt with by the Department in charge of regional territorial development and transport (Département de L’aménagement du territoire communautaire et des transports).

Within ECOWAS, trade facilitation depends on the Trade Sector and particularly the Department on Trade, Customs and Free Circulation, while Transport is the responsibility of the Infrastructure sector and related department.

Hence trade and transport are covered by both RECs within different and autonomous departments with distinctly separate mandates. In addition, the transport sector is generally allocated to departments focusing mainly on infrastructure. There is also a general consensus that transversal coordination and cooperation at RECs level are poor.

Both RECs have developed a number of regional trade facilitation initiatives as well as road transport regional instruments intended to facilitate and develop inter-state transport and trade.

1.2 Regional instruments designed for trade and transport facilitation

Both ECOWAS and WAEMU/UEMOA have addressed trade issues and transport facilitation issues.

**In the field of trade facilitation,** many initiatives have been developed in order to facilitate regional integration. Both RECs have developed respective Common External Tariffs. In the case of ECOWAS regulations have led to the ECOWAS Common External Tariff (Tarif Extérieur Commun de la CEDEAO) which entered into force on 1 January 2015.

On 25 September 2014 WAEMU/UEMOA adopted Regulation N°7/2014/CM/UEMOA, which established, per categories, the list of goods related to the tariffs and statistical nomenclature of the Common External Tariff (Tarif Extérieur Commun TEC).

Both Tariffs have been converging to ease their implementation by member states and avoid discrepancies.
In the field of road transport facilitation, many instruments have been in an attempt to harmonise vehicle weight and dimensions, regulation of inter-states transport, and the facilitation of transit movements through a regional customs system.

To facilitate inter States transport both ECOWAS and WAEMU/UEMOA adopted several instruments, as listed below:

ECOWAS, established in 1982, incorporated the adoption of 2 key conventions to facilitate and develop inter-states transport:

*Convention A/P.4/5/82 relating to the organization of inter-State road transport of goods signed in Cotonou on 29 May 1982 (TIE convention)*

This Convention aims at harmonizing aspects of inter states road transport, through defining the main regional itineraries, the weight and dimensions of vehicles. It established a mechanism of authorizations to be issued to road carriers that need or want to be involved in regional transportation (goods and passengers). Finally, it set out the ground rules for bilateral agreements to regulate freight distribution and quotas mechanism to the benefits of landlocked countries.

*Convention A/P4/5/82 on inter States transit of goods (Known as TRIE Convention) signed in Cotonou on 29 May 1982*

This convention establishes the TRIE customs transit system and guarantee mechanism, designed to facilitate the transit of goods from port to final destination in the hinterland through a regional customs transit system and guarantee mechanism.

*Additional Convention A/SP/1/5/90 instituting a TRIE guarantee mechanism adopted on 30 May 1990 in Banjul*

In response to difficulties in the implementation of the TRIE convention, regarding the establishment of the guarantee mechanism and the mutual recognition of guarantors, this additional protocol was adopted.

The ECOWAS Convention clearly set out provisions concerning the organization of inter-state road transport of goods, along vehicles’ weight and dimensions allowed to operate on the regional itineraries. However, in practice, parts of the regulations were not really obeyed. In particular, overloading practices had a recurrent negative impact on infrastructure preservation. Furthermore, many obstacles to trade and transport were identified such as the large number of legal and illegal check points, along with unnecessary border crossing difficulties.

WAEMU/UEMOA addressed these issues through the following instruments:

*Regulation N°14/2005/CM/UEMOA, 16 December 2005 relating to the harmonization of standards and control procedures for size, weight and axel loads of heavy vehicles transporting goods in the Union*

This regulation aimed at modernizing the weight and dimensions conditions and more importantly to define rules to combat overloading practices, by imposing on freight operators that move more than
200,000 tonnes per year, a duty to equip themselves with axle weighing stations. The regulation also defines sanctions to be applied in case of non-compliance.

Decision n° 15/2005/CM/UEMOA, related to a regional control plan and Directive n° 08/2005/CM/UEMOA, both 16 December 2005 relating to the decrease of the number of check points on the union corridors.

In order to attempt to reduce the number of check points at national levels, this regulation sets out a principle that, on the regional itineraries, check points should be limited to three in total: one at departure; one at borders; and one at destination. The objective was to reduce the time spent at unnecessary control points and eliminate associated corruption that impacted transport costs.


This decision created 11 corridors and organized their management. As a result, each corridor is now managed by a committee (Comité de Gestion des corridors) that is under the supervision of a Steering Council (Conseil d’Orientation) that is in turn under the general supervision of the WAEMU Commission. This decision also details the role of both the Steering Council (Article 5) and the Managing Committees (Article 8).

Regulation N°15/2009/CM/UEMOA, 17 December 2009 relating to the legal status of joint borders control post

In order to address the issue of border crossing difficulties this regulation was adopted to promote and harmonize conditions for establishing joint border control posts on the key regional itineraries. The regulation sets out the conditions to be respected and the way in which neighboring countries should operate joint border posts.

At this time technical standards for vehicles weight and dimensions were not fully aligned between the ECOWAS 1982 Convention and the UEMOA 2005 regulation. Hence this aligns both RECs’ technical standards.

2 Lack of regional consolidated vision on trade and transport facilitation in the global context of development policies

2.1 Lack of transversal vision for Trade and Transport facilitation

Both RECs have developed initiatives and instruments in the fields of trade facilitation as well as in the field of transport development. However, it seems that the regional instruments developed so far have been a piecemeal approach aimed at solving problems as they arose, as opposed to representing regional vision and strategy aimed at developing regional integration and trade development, through reduced transport costs. In part, the segmented institutional arrangements contributed to this.

The institutional split of responsibilities means that trade and transport issues are not handled through a regional transversal vision, but separately without co-ordination.
In addition, as transport is placed within Infrastructure or territorial development departments, the REC’s have tended to focus more on infrastructure programs and technical aspects rather than on the composition of the sector itself, along with its strength and weaknesses. Efforts have been deployed to facilitate movement of goods and vehicles but very little has been done to ensure the emergence of a real road transport industry able to serve trade in a cost effective manner.

This lack of transversal vision at regional level is also evident at national levels.

2.2 RECs and the implementation of the WTO Agreement on Trade Facilitation (ATF)

2.2.1 RECs and the WTO ATF

During the negotiation process that led to the adoption of the WTO Agreement on Trade Facilitation, both REC’s have made efforts to assist their member states first during the auto evaluation process, during the negotiations themselves and, since its adoption, in the preparation for the implementation of the agreement.

Documentation produced in the context of the ATF, has mainly focused on customs issues, procedures and customs reforms while the transport sector’s role and contribution to trade facilitation has not been fully addressed.

National Committees were established during the ATF negotiations in order to discuss trade facilitation and define needs and political negotiating positions. Very few of these national committees included representatives of road transport sector, although freight forwarders and customs brokers were fully involved.

It appears that the transport dimension of trade facilitation was ignored due to the lack of a transversal approach. Such an approach would have focussed on procedures and documents and the key role of the transport sector in moving goods that are traded.

The ATF also focuses on the implementation of Joint Border Posts or Single Window systems as well as exchange of data and interconnection of customs systems which by essence are transversal issues.

UEMOA has developed a legal framework for the Joint Border Posts but there is still no regional consolidated vision on exchange of customs data nor on the establishment of Single Windows.

2.2.2 A typical example of the proliferation of uncoordinated Single Window systems

Insufficient attention has been given at regional level to develop a regional vision for the establishment of Single Windows. Indeed, by and large, Single Windows have proliferated at national level without national visions on the issue.

A number of examples have been observed in Western African Countries and presented in Annex 1. From this it can be concluded that:

- Single Windows Systems have proliferated at national level without a regional vision of what is to be achieved in terms of trade and transport facilitation. They have instead focused on sectorial
and sub sectorial needs. This lack of vision in terms of scope of the SW has resulted in Nigel, for example, with a multiplicity of isolated Single Windows.

- This lack of global vision also led to a very compartmentalized and fragmented approach where trade procedures and customs issues are handled separately, forcing transporters to duplicate the submission of the same data to various systems for a single operation.

- The lack of global vision coupled with the fact that public agencies are not used nor encouraged to cooperate together impedes the designation of a leading agency to manage and host a Single Window system.

- At the Port of Cotonou, the Single Window does not allow the online payment, while the deployment of ASYCUDA World would allow online payment of taxes and duties and other customs related dues. The absence of global vision and of coordination deprives customs and the private sector from the benefit of the deployment of this SYDONIA facility.

- Some transport issues are not covered by Single Window online systems. Operations that could easily be facilitated with online solutions include authorization issuance, and registration of vehicles.

In the absence of Regional Recommendations to harmonize the implementation of SW at national levels, national initiatives have proved somewhat unco-ordinated and result in international operators that move transit goods being faced with a succession of national single windows. The resultant need to submit the same data in different formats to each national system adds to global logistics costs.

2.2.3 Establishment of “One Stop Border Posts”

The One Stop Border Post concept is now a common feature on agendas of regional communities and countries aiming to facilitate trade and regional integration.

i. Basic principles

Border crossings are a major obstacle to trade and transport as they involve the repetition of controls, of procedures and documentary requirements.

It is therefore considered that organizing border posts in such a way that processes which currently required twice (exit of one country and entry of the other) can be accommodated in one set of procedures.

The implementation of One Stop Border Posts (OSBP) requires a combination actions to achieve expected results. There is a range of interventions of various control authorities with different mandate and focus, namely:

- Customs
- Police
- Immigration
- Transport
- Sanitary, veterinary
- Quality and technical
The One Stop Border Post Source Book, published in 2011 provides a comprehensive approach and highlights the key elements to take into account when embarking in the planning and implementation of an OSBP.

**ii. Main models of OSBP**

In general, OSBP are represented under mainly three different types, all aimed at allowing persons and goods to stop only once at a given border.

**Common facility on one territory**

In this model:

- The OSBP is located on the territory of only one of the 2 countries
- Control procedures for both countries are carried out at only one place in each direction

The model can provide a simplified system for users, whilst authorities of both countries still carry out all their respective checks and controls.

**Juxtaposed border post**

In a juxtaposed border post a customer will stop only once controls will be performed only once by the authorities of only one country which will act on behalf of the other country’s authorities.

A juxtaposed border post is the most efficient model, but requires careful negotiation to operationalize such a model.

**Straddle Border Post**

In this model a Border Post facility is established exactly on the border, with each country’s control authorities operating the part of the facilities located on their territory.

This model can contribute to facilitating border processing activities but requires efforts in terms of coordination of controls between authorities of both countries in order to realise decreases in processing times.

**iii. Conditions for establishing OSBPs**

**Government commitment**

The governments of neighboring countries concerned must be committed the One-Stop Border Post concept. The level of commitment tends to vary with the type of OSBP to be implemented.

Commitment is required in terms of:

- Design and implementation of a OSBP
- Joint or co-ordinated operations.

The two governments have therefore to commit to

- Enforcing the original decision to proceed
- Arranging for the land acquisition and connected legal status
• Sourcing financing
• Organising the various national authorities to cooperate and exchange information, and, if not, delegate to one leading agency some power and responsibilities
• Ensuring that these national authorities on both sides cooperate and coordinate their efforts and activities together

**OSBP is one component of global trade and transport facilitation policy**

An OSBP can only be successful if conceived and implemented under a comprehensive trade and transport facilitation vision and policy. The benefits of establishing an OSBP can only be realized if there is harmonisation of

• Conditions and requirements imposed on persons, goods and capital;
• Foreign trade and transport and other national procedures and required documentation; and
• Customs procedures, documents and guarantees

**OSBP Location**

Many initiatives in Western Africa did not prosper due to a lack of agreement on the location of the OSBP, each country claiming it should be located on its own territory. They criteria in OSBP location are:

• Positioning on the corridor
• Accessibility and connection to main networks in terms of physical infrastructure, but also electricity, water supply and ITC
• Security and capacities to adequately control on the Border Post area
• Geographical constraints of the area and expansion possibilities
• Potential for using existing facilities
• Ensuring the speedy treatment of the expected traffic (in terms of volume of vehicles, private and commercial, of passengers and goods)
• Providing sufficient facilities for users (parking, services to trade and persons.
• The final location choice will be conditioned by the choice of the OSBP’s model that will be chosen

**Selecting the OSBP model**

The selection of the model to be implemented will depend on satisfying the conditions above, along with the level of government commitment, mutual confidence and recognition and geographical conditions. By and large strong commitment would tend to favour a Juxtaposed model or Common facilities on one side. Less commitment would probably lead to a Straddle model. Other factors affecting the model selection are:
• Establishment of an enabling legal environment
• Coordinated approach of controls

Enabling legal framework
An enabling legal environment should aim to cover:

• the location, ownership of the land, sovereignty recognition
• the establishment of a joint management committee
• the freedoms of respective control authorities to access and act on respective territories (in the limits of the facilities)
• security arrangements
• access arrangements of both countries to the facilities
• coordination mechanisms to be put in place
• mutual recognition of controls
• the sharing of data and notification of special situations
• criteria and conditions for private service providers to be located within the facilities

Coordinated approach of border controls
This is particularly valid in the context of a Straddle and to a certain extend of a Common Facility Models where both countries authorities continue to carry out their respective controls.

To avoid duplication and repetition of controls it is recommended that controls are undertaken in a coordinated manner by both countries authorities jointly, each one acting on its own behalf. This allows to eliminate useless waiting times and improves border crossing performance.

In Western Africa, these principles have not always been followed as illustrated by the examples presented in Annex 2.

iv. Key recommendations
The implementation of an OSBP can contribute to improving corridor efficiency in terms of reduced border crossing times and lower related costs, particularly when implemented undr a comprehensive policy of trade development and regional integration.

The over-riding objective should be to limit the number of stops at border, the number of controls, the number of documents to be produced the time spent as well as direct and indirect costs incurred.

These objectives can be further met if border controls are limited, and controls applied at departure, and final destination.

The benefits of OSBP can be further enhanced by implementing some best practices that could be developed at REC level and implemented in a harmonized manner. These are outlines below
Use the UN International Convention on Harmonization of Frontier control of goods from 1982.

The UN International Convention on Harmonization of Frontier control of goods (1982) can contribute to facilitating trade and transport through the promotion of key best practices to ease border crossings through the following principles:

- Limit as much as possible the number and extend of controls at borders and rely on controls at departure and destination
- Use internationally recognized certification to avoid duplication of controls such as:
  - International Weighing certificate that is issued at the first weighing station and is recognized en route avoiding new weighing of vehicles unless an irregularity is suspected. This can be implemented through RECs’ instruments without difficulty
  - International Technical inspection certificate of vehicles that can reduce technical controls of vehicle at borders
  - Organize priority treatment at borders of certain transport such as live animals, perishable food stuffs, and hazardous goods, based on harmonized practices

Other areas of improvements

Border crossing procedures can be also be facilitated through:

- Mutual recognition of transport documents (consignment notes) to ensure that the international consignment note established at departure is valid for the entire journey until destination thus avoiding recourse at borders for any national transport document
- Mutual recognition of regional transit documents and guarantees to avoid the carrying out at borders of unnecessary customs formalities
- Development of interconnection of customs systems and exchange of data which contributes through advanced cargo information for example to accelerate the border processing time while enhancing security of trade through advanced risk assessment and analysis.

2.2.4 Dry Ports

i. Challenges

Dry ports were developed to address the issue of port congestion caused by the accumulation of containers and goods in a port area due to long and lengthy administrative procedures. They are generally located inland.

Ports that suffered from their geographical location being constrained, and/or with congested road and rail links became rapidly saturated due to the low speed of releasing procedures from the port area. The port’s operational area then a storage zone which further congested operations. Genoa is a good example from Europe.

Dry ports were therefore developed to speed up seaport activities and avoid long storages in the port. Goods and containers arriving in the port would be immediately transported to a remote storage area
where all formalities would be carried out before their release and the transport of goods to destinations.

Hence the initial objective of Dry Ports was not to achieve trade facilitation (harmonisation and simplification of procedures) but to reduce port congestion. Dry Ports are simply focus on eliminating port congestion to accelerate the transit of goods in the port area. They do not contribute to simplifying trade and reducing its costs. Indeed, the implementation of the Dry Port concept can lead to additional operations and costs, as listed below:

- Specialized operators are needed to transport goods from the Port area to the Dry Port
- Additional investment in a vehicle fleet (rail or road) that is only dedicated to this type of transport is often required
- Special releasing procedures are needed to allow containers or goods to leave the port for the Dry Port
- Multiple loading and offloading is an additional risk in terms of potential damage and security
- The customs guarantee that is required to cover the customs risk of having goods moved on the customs territory in exemption of taxes and duties (from port to dry port) is an additional cost imposed on the goods. This specific customs guarantee cannot be covered by the standard Regional Transit Guarantees (TRIE or COMESA) as these transit guarantees suppose an international transport without off-loading en route.
- Special Customs control procedures have to be implemented move goods from a port to a dry port. This implies not only controls at the port exit, as it would be the case without goods passing by a dry port, but also, controls at the entry of the dry port and at the exit when finally goods will be shipped to their final destination.
- Special surveillance on the itinerary including escorts, patrolls etc.
- Special transport documentation (consignment note or transport order) to cover a land transport leg

Within a Dry Port operations are similar to that which would be carried out in the port itself:

- The operations in the Dry port (storage and administrative procedures) are the same as the one carried out in the Port itself if goods had to stay there before leaving the port area.
- Cost of the operations realized in the Dry Port may differ from those incurred in a port for same level of actions and services.
- Operations to clear the goods for their release for transport towards their destination would be the same as if they were carried out in the port.
- Any organization of final land transport would be similar to the one used in a port
- Transit Customs procedures (COMESA, TRIE) for the international transport would require the same efforts as if they were carried out in the port itself.
Dry Ports cannot themselves be considered as trade facilitation instruments as they do not contribute to:

- Shortening the delay of final delivery
- Simplifying trade procedures, (on the contrary, they add procedures, documents and requirements
- Reducing logistics cost

New Dry Ports are being constructed because of the difficulties in organizing the international movement of goods based on the established regional instruments as Mutual Recognition amongst RECs and Member States of documents, controls and procedures.

This is particularly demonstrated by the example of the Dry Port at Ferkessedougou in the North east of Ivory Coast which is being developed for shipments from the Ivory Coast Ports of San Pedro or Abidjan to Burkina Faso. (Annex 3 presents the implications of this project)

**ii. Recommendations for Dry Ports**

If conceived through a global vision of trade development, Dry ports may contribute to facilitating trade and transport when certain preconditions are taken into account, with the aim of:

- Simplifying trade and transport procedures through a reduction of regulatory requirements in terms of steps to be undertaken, documents to be obtained or provided, data to be transmitted.
- Reducing global trade and transport costs by ensuring that the final benefits obtained will be higher than the requirements imposed. For example, if passing through a Dry Port allows to drastically diminish the final delivery time, the eventual additional costs incurred would be compensated by the rapid availability of commodities that can be put on the market quickly.

Therefore, implementing Dry Port solutions implies a need to work on a range of facilitation measures, and when envisaged in the context of an international corridor, a Dry Port concept should be conceived in a consolidated bilateral approach.

A Dry Port should result from a global trade and transport strategy, but it should also in itself serve clear purposes that need to be precisely describes and assessed. In particular the Dry port should answer the following questions:

- Is it aimed at decongesting the port area to allow a quick flow of goods and containers in the port and allow traders to proceed with the various procedures in the Dry Port?
- Will it serve domestic or international markets or both?
- Will it be dedicated to certain types of goods or all kinds of commodities, would it be restricted to containerized traffic or also conventional?
- Will it serve certain destinations or all possible destinations?
- Will it be dedicated to goods subject to specific Customs procedures (import, export, transit, temporary storage, inward processing) or will it be opened to all kind of customs procedures?
• Will it allow the presence of traders openly, or only based on authorizations or accreditations, and will the various actors providing services inside the Dry Port be subject to a selection process, based on what criteria?
• Would it be restricted to one mode of transport or will it be a multimodal platform?
• Can it benefit from ITC services, and of which type (cables, fibre-optic, satellite)? Chose an optimal geographical location.

If the Dry Port is developed to allow fast processing of goods in the maritime port, the ideal location would be near by the sea port, connected to it ideally through a dedicated infrastructure (road and or rail) that would be secured (walls, video surveillance, controlled access, patrols or escorts). Thereafter the Dry Port itself should be connected to the key roads and rail network to facilitate the movement of goods from the Dry Port to the markets served.

If the implementation of a Dry Port Concept encompasses other objectives, its location should be based on an analysis of the following:

• If the Dry Port is mainly oriented to domestic market, its location should favor connections to national infrastructure network.

• If the Dry Port is to serve international hinterland destinations, it should be placed near the port but with easy and fast access to key Regional Corridors.

• It should be at the start or at the end of the corridor or route in mind, either close the port or close to destinations in hinterland countries).

iii. Dry Port: Customs and fiscal facilitation and free zone concept

Trade may really benefit from a Dry Port where goods benefit from fiscal and customs simplifications. Dry Ports could allow special customs and fiscal treatment through an exemption of payment of taxes and duties on goods stored in the platform. Temporary customs storage procedure can be established, by which the importer, against a customs guarantee, is allowed to store his goods under customs control under suspension of payment of taxes and duties which only become due when goods are taken out from storage according to real needs of the traders and for which import procedures are undertaken only when leaving the customs warehousing premises. This will assist cash-flow.

Such customs warehousing makes sense if located in the vicinity of the port for domestic markets or close to the market in the country of hinterland destination.

International trade and globalization are increasingly requiring goods to be processed at different locations while in between each processing step they are transported and should be subject to a specific customs treatment. Such customs procedures (inward or outward processing) allows goods to be moved between their various processing locations in exemption of payment of taxes and duties based on a temporary import procedure.

Customs and fiscal facilities may be offered and could become a source of attractiveness for investors and for delocalized production units when coupled with a foreign investment policy that is attractive.
This concept allows a move from a conventional Dry Port to a more dynamic concept of a free zone that could then be combined with an attractive investment policy to contribute to industrialization. Tangier Med port and free zone provides an example for the development capabilities of a global trade and economic development strategy.

3 National Development strategies and policies

3.1 Current Status

Over the past decade, almost all western African Countries have adopted national development policies sometimes supplemented by sectorial strategies.

Most of these Development policies address the issues of trade and economic development through various components such industrialization and export diversification, and of trade facilitation under procedural and documentary simplifications.

Most of these development policies are also address transport issues but generally through the promotion of infrastructure projects, and tend to be less concerned with the development of a competitive and reliable transport sector is concerned, and in particular a road transport industry.

This is evidenced in:

- Ivory Coast National Development Plan for the period 2012-2015 as well as in its successive Plan for 2016 to 2020

In the first period, much consideration is given to infrastructure development and maintenance, with little devoted to the creation of a sustainable road transport sector. In 2015, during the preparation process of the second Plan, the same path was followed. However, the Matrix of actions provides an opportunity to introduce specific elements aimed at reinforcing the sector including professional training for company managers and professional drivers, support to the sector and its newly created High Council federating all local syndicates, and a fleet renewal program.

Equally, the Burkina Faso National Plan for national economic and social development which was preliminarily adopted in May 2016 also focusses on infrastructure while the development of the road transport sector is not fully considered.

Many efforts have been deployed in Western Africa to promote and develop trade integration, particularly through Diagnostic Trade Integration Studies (DTIS). Most of the DTIS carried out from 2000 to 2014 in western African dedicate a chapter on trade faciliation. However, they mainly concentrate on customs issues and traditional trade facilitation problematics as key elements to promote trade integration at national and regional levels. While the transport sector was identified as a problem, no consolidated analysis was carried out to identify the key blocking factors for the sector’s development and most of the solutions focused on symptoms and not on the real causes. In the light
of the WTO ATF, actualizations of the DTIS took place and started to fully integrate the transport sector in the scope of trade facilitation and regional integration.

3.2 Paradox situation of the road transport sector in the regional and national political and economic environment

The road transport sector is generally identified in Western Africa as a weak, dispersed, low performing and expensive sub-sector.

The main causes of this are identified as: lack of professionalization, poor profitability leading to usage of outdated fleet, non-transparent freight market and predominance of informal operators in particular as transport intermediaries, poor service quality and performance thus negatively impacting economic development and trade expansion in particular at regional level.

However, despite this now well acknowledged diagnostic, the regional policy and the national visions tend to focus on curing the symptoms rather than resolving the fundamental causes of the poor road transport sector situation.

Whilst some countries such as Ivory Coast or Burkina Faso and Senegal have started to adopt some rules for access to the profession based on qualitative criteria such as professional competence for road transport company managers and professional drivers, no initiative has been taken at the regional level to create an appropriate harmonized environment to allow the sector to progress.

4 Low implementation of regional instruments

4.1 Status

ECOWAS and UEMOA aligned their External Common Tariffs within ten years. However, in the transport facilitation area regional instruments tend not be implemented as they could or should be.

*The Convention A/P.4/5/82 relating to the organization of inter-State road transport of goods signed in Cotonou on 29 May 1982*

This implemented by members States in particular as far as inter States authorizations are concerned (Green Cards for goods and Grey Cards for passengers). However, each State organises the issuance of these authorisations independently due to the lack of regional harmonized procedures. In addition, information sharing is low in terms of number of authorizations issued, suspended or revoked. In the absence of such systematic information sharing, rules can easily be disregarded. Thus this convention regulating inter-state transport to harmonize competition conditions is not fully playing its role.

*The Convention A/P4/5/82 on inter States transit of goods (Known as TRIE Convention) signed in Cotonou on 29 May 1982 and its Additional Convention A/SP/1/5/90 instituting a TRIE guarantee mechanism adopted on 30 May 1990 in Banjul*

This convention faces difficulties that impede its harmonized implementation. Despite the Additional Protocol organizing the guarantee mechanism, the TRIE faces implementation difficulties and
limitations. In the absence of regional monitoring, the implementation of the convention is left at national level and initiative. As a result, TRIE is effectively implemented at national level where transit declarations and guarantees are issued and collected. Guarantee cost sharing amongst the guarantors is not functioning and the lack of mutual recognition of controls and documents leads to the need to lodge at each border a new declaration and buy a new guarantee thus eroding the potential benefits of the Convention which aims to facilitate border crossings.

In addition, the lack of cooperation amongst bordering countries’ customs limits the exchange of transit data, thus contributing to create the conditions for border congestion due to the need to carry out unnecessary procedures.

While many countries have deployed ASYCUDA World and its transit module, the automated exchange of data facilities are not fully implemented.

Despite this some bilateral initiatives demonstrate that TRIE can be efficient, such as experienced between Ivory Coast and Burkina Faso.

*Regulation N°14/2005/CM/UEMOA, 16 December 2005 relating to the harmonization of standards and control procedures for size, weight and axel loads of heavy vehicles transporting goods in the Union*

This regulation adopted in 2005 is still not implemented in practice due to lack of government commitment. It appears that attempts by Member States to impose the compliance of the Regulation 14 by implementing systematic weighing controls and immobilization of non-compliant vehicles led to diplomatic interventions from hinterland countries, with demands release impounded trucks and ensure status quo.

While the Regulation dictates that freight platforms generating more than 200,000 tons per year should organize weighing stations, in practice, almost none has been equipped, including in Ports.

Control of overloading en route has been delegated by concession to private sector entities in some cases, such as Ivory Coast and Guinée Conakry. Remuneration of the concessionaires is based on the attribution of up to 60% of the financial sanctions imposed on non-compliant transporters. This remuneration structure creates a conflict of interest, as the concessioner has no interest to avoid overloading practices by installing control stations near by the loading points but rather to undertake controls en route to ensure sufficient revenues. As a result, the objective is not to avoid the movement of overloaded trucks by blocking them at the start of the transport but rather to allow them to exit the loading places and charge as much penalties as possible en route.

In addition, none of the western African countries, nor the regulation itself imposes sanctions for the shippers loading road vehicles over the weight limits.

To address this, in 2016, Ivory Coast and Burkina Faso, under the World Bank Regional Budgetary Support (Appui Budgétaire Régional) started to implement a program under which the ports are equipped with weighing stations and overloading can be penalised through impounding extremely overloaded vehicles along with compulsory off-loading of excess loads.
Even so, faced with the impossibility being able to implement Regulation 14, Ivory Coast is now investigating the possibility of establishing a Dry Port in the northern part of the Ivory Coast territory at Ferkessédougou, through which all consignments (bulk or containers) destined to hinterland countries (Mali, Burkina Faso and Niger) would be transported from Abidjan and San Pedro by Ivory Coast compliant operators. This project is under preliminary assessment but may not be implemented.

*Decision n° 15/2005/CM/UEMOA, 16 Decembre 2005 related to a regional control plan and Directive n°08/2005/CM/UEMOA, 16 Decembre 2005 relating to the decrease of the number of check points on the union corridors.*

Efforts have been undertaken in all countries to reduce the number of legal check points and to eradicate the illegal controls posts. However, despite its adoption in 2005, this regulation is still not fully implemented as operators regularly complain about the multiple checks they are facing on the main regional itineraries.

*Decision N°39/2008/CM/UEMOA, 17 Decembre 2009 related to Corridors and their management*

Contrary to practices in Eastern or Southern Africa, in Western Africa corridors are not subject to strong formal management institutions.

*Regulation N°15/2009/CM/UEMOA, 17 Decembre 2009 relating to the legal status of joint borders control post*

This regulation appears to be complex in its provisions, for example the extra territorial status of JBP under direct supervision by UEMOA Commission but with management delegated to private institutions.

Concrete implementation has been delayed and the results are still less than impressive, as evidenced at Cinkansé on the Togo/Burkina Faso border. The project for a Joint Border Post financed by the EU at the Benin – Nigeria border post of Kraké – Sémé is delayed and still under construction.

### 4.2 Main obstacles and possible way forward

The low implementation of regional instruments results partly as result of a lack of governments’ commitment, and also due to a lack of regional monitoring and enforcement mechanisms.

Within member states a number of obstacles are faced:

- Opposition of public and private sectors which often fear to lose control over operations if facilitations are granted
- Lack of capacity building policy to enforce the new rules
- Lack of modern IT facilities
- Lack of confidence between countries leading to a lack of acceptance of the mutual recognition principle
- Lack of management skills on shippers and importers side which leads to the absence of anticipated actions to ensure the smooth transfer of goods from port to hinterland destinations.
By and large these obstacles have not been addressed by national governments.

Although both RECs have started to implement survey mechanisms, they remain very general and focused on more strategic and political issues while trade and transport facilitation are more considered as technical matters.

In addition, Regional instruments do not provide for regional monitoring mechanisms as is the case for most of the UN Conventions. These usually, through the creation of Administrative Committees establish an international implementation monitoring. RECs’ Commissions rarely intervene at national level.

5 Bilateral experience: the way forward?

5.1 Bilateral road transport agreements

The ECOWAS Convention A/P.4/5/82 relating to the organization of inter-State road transport of goods signed in Cotonou on 29 May 1982 explicitly invites its Member States to organize many road transport sub-sectoral issues through bilateral agreements.

All western African Countries from Coastal states and from the hinterland have signed Bilateral Agreements, most of them in the late 1970’s or in the 1980’s. They mainly focus on establishing the transport quotas allowed for hinterland and coastal states’ road transport operators through the following share:

- For transport of transit goods via ports, 2/3 are reserved to hinterland countries operators and 1/3 for coastal states
- For bilateral goods exchange, 50/50 %

In practice, due to the low tariffs practiced, the bad operating conditions, the multiplicity of procedures to be complied with and the poor traders’ and importers’ practices that are summarized in Annex 4, coastal states operators are not filling their quota of 1/3.

Existing bilateral agreements address bilateral transport relations but not the issue of access to profession rules as a tool to harmonize competition condition and enhance transport services reliability.

5.2 The experience of the bilateral transport relations between Burkina Faso and Ivory Coast

Recently, Ivory Coast and Burkina Faso renewed their Road Transport Cooperation Protocol and inserted provisions aimed at implementing in the bilateral context the Regional Instruments.

In particular, the signed bilateral road transport protocol provides:

- That both parties should harmonize their transport legislation in particular as far as access to profession rules are concerned
• For the strict implementation of the UEMOA regulation 14 on weight and dimensions and to introduce in both countries legislation the principle of direct responsibility and penal sanctions for shippers in case of Overloading (total or per Axel)

• For the sharing of information on issued inter States Authorizations

• For the strict implementation of the TRIE convention and in particular its additional protocol on the guarantee cost sharing between the guarantors

• For agreement to implement various regional instruments (regional control plan, road safety audit plan,

• For the finalization of interconnection of IT Customs services

• For harmonised cargo tracking systems

• The establishment and promotion of the Authorized Economic Status

• Mutual recognition of respective transport consignment notes (to avoid to duplicate consignment notes for bilateral transport)

As a result this bilateral protocol is a tool to ensure the implementation of Regional instruments.

5.3 Bilateral implementation of the TRIE

Faced with the difficulties created by the non-harmonized implementation of the TRIE on the corridor Abidjan – Ouagadougou, in 2014, Ivory Coast and Burkina Faso, decided to ease the implementation of the TRIE through:

• The unique payment of the guarantee at the start of the transport and the sharing of the guarantee price between the 2 guarantors according to a transparent monitoring mechanism

  In 2015, this decision led the Burkina Faso Customs to suppress the national requirement for payment at border of the TRIE guarantee cost (while payment was already done at departure for the full transport).

• The interconnection of both countries IT customs systems

Both countries migrated to the ASYCUDA World and implement the transit module.

The interconnection of both countries IT customs services is facilitated in particular to exchange transit data and is under way. It should ultimately lead to accelerated border procedures for TRIE movements.

Efforts are also undertaken for a bilateral implementation of the TRIE between Senegal and Mali through mutual recognition of transit documents and guarantees.
6 Recommendations for moving up trade and transport facilitation on the political agenda

6.1 Link trade facilitation and transport facilitation

As trade facilitation aims at improving trade conditions and developing new trade flows, it is essential that the transport sector is considered as a key economic sector and is duly involved in all trade facilitation discussions.

As trade and transport facilitation are closely related and dependent on each other, it would be wise to systematically include the road transport sector in the work of the National Trade Facilitation Committees that are put in place in the Context of the WTO Agreement on trade Facilitation.

At REC’s level, the transport sector should not be considered just as infrastructure but should be viewed in the context of the services it provides to trade. As such, systematic and institutional transversal cooperation should be established within both UEMOA and ECOWAS Commissions between the two departments that are in charge of trade and transport.

6.2 Define a Regional vision on trade and transport facilitation

RECs should play a decisive role in facilitating the adoption of a consolidated vision on trade and transport facilitation that addresses the roots of the problem in order to guide in the development and implementation of the following recommendations. These should not be developed independently from each other in under a global regional vision, as each element contributes to achieving the identified over-arching objectives.

6.3 Use the bilateral context to implement the regional instruments

As bilateral relations appear to be more efficient, the case of the bilateral cooperation between Ivory Coast and Burkina Faso should be promoted as a best practice towards other Member States of both RECs.

6.4 Adjust some regional instruments

Some of the key regional instruments would need to be updated in order to incorporate the evolution of transport technics as well as the needs emerging from an increasing globalized economy.

The TRIE convention would gain in being updated to:

- Incorporate dematerialisation of TRIE transit Declarations and guarantees
- Introduce eligibility criteria for road transport operators based on qualitative conditions
- Review the basis for the calculation of the guarantee amount to introduce a risk based principle rather than a fixed percentage of the value of the goods
- Establish a permanent monitoring mechanism through a dedicated Administrative Committee composed of all Member States representatives and of representatives of the private sector in particular from the road transport sector
The TIE convention should also introduce:

- Best recommended practices for the issuance of inter States Authorizations
- Harmonized conditions for access to profession rules based on qualitative criteria to ensure professionalization of the sector
- A systematic exchange of data amongst Member States via the ECOWAS commission on inter States authorization issuance, suspension, revocations
- Modern vehicle technical requirements to encourage and facilitate the use of newer fuel-efficient and environmentally friendly vehicles
- A standard and recognized Consignment note for inter States transport movements

The UEMOA Regulation 14 could be improved by:

- Introducing the principle of systematic liability and penal sanctions to shippers in case of overloading situations (total or per axle)
- Introducing a Regional weighing certificate based on the example of the UN Convention on harmonization of frontier control of goods from 1982.

6.5 Adopt regional best recommended practices for developing Single windows

RECs should define a common “Single Window” vision, so that their member states develop their Single Windows in a harmonized regional context allowing National Single Windows to interchange data and interact together.

6.6 Review the UEMOA Regulation N°15/2009/CM/UEMOA, 17 Decembre 2009 relating to the legal status of joint borders control post

The experience demonstrates that this regulation appears to be complex and difficult to implement. Simplification could be introduced, as well as some best practices to facilitate the development of OSBP, as outlined in section 3.

6.7 Adopt regional guidelines for the establishment of dry ports along the main corridors

As outlines in Section 2.
7 Annexes

Annex 1: Example of Single Windows Systems developed in Western Africa

**Single Windows in Benin**

**The Single Window at Port of Cotonou**

A Single Window” has been developed and implemented in Benin for the Port of Cotonou. It is administered by a private company, Société d’Exploitation du Guichet Unique du Bénin (SEGUB), under a 10 years’ concession.

The use of the Single Window is compulsory for any goods passing by the port.

The system allows all public administrations and private companies (Customs, Police, Port Authority and Shipping lines, importers, exporters, brokers, forwarders) involved in movement of goods via the Port to trace goods and to submit data and various declarations as well has to obtain various required documents.

Each consignment passing by the port is captured and identified and each actor processing the goods at all steps will record its intervention (stevedoring, storage, internal carriage, customs payment, port fee…). All related cost is consolidated by the Single Window and will allow the edition and printing of a detailed global invoice that will recapitulate all costs incurred including customs taxes and duties or transit guarantee cost. This recapitulative bill (Bordereau de Frais Unique) is remotely printed and the interested trader goes to one of the accredited banks to settle the total amount due. The payment is credited on the SEGUB Single Window’s account which in turn will distribute to all concerned the amount corresponding to their activity.

When SEGUB account is credited, the release of the goods is confirmed and goods can leave the port area.

The implementation of the Single Window allowed to reduce the average release time from 37 to 5 days.

While the System is only active at the Port of Cotonou to cover goods transiting by the Port, it is foreseen to extend it to the border post of Hillacondji neighboring Togo.

**The Single Window for Foreign Trade**

Since April 2015 efforts have been deployed to develop a Single Window for Foreign Trade with a view to facilitate and simplify foreign trade operations in particular through dematerialization of documentation obligations.

This Single Window first focused on operations for used imported vehicles via the Port of Cotonou and will progressively be expanded to other trade operations on goods imported or exported via Port of Cotonou and further on to other points.

Through this Single Window, operators may request, pay and obtain certain documents such as import or export certificates or special licences, certificates of origin… The Single Window will distribute to
the entities concerned the amount corresponding to the issuance of their documents and traders will be able to follow their request online until its finalisation.

**Progressive migration to ASYCUDA World**

Parallely to these important developments, the Customs are ensuring the migration of their system toward ASYCUDA World with the assistance of UNCTAD.

One of the ASYCUDA World’s functionalities very much welcome by the traders in general is the possibility to lodge directly customs declarations, in particular for transit and to pay customs dues on line.

However, the activation of these functionalities is certainly conflicting with the facilities offered by the Single Window of the port of Cotonou.

**The Single Window Experience in Niger**

**The Foreign trade formalities**

The Chamber of Commerce, Industry and Craft has been tasked with the establishment of a Single Window approach for facilitating foreign trade formalities.

Through this Foreign Trade Formalities Single Window, importers and exporters have the possibility in Niamey and in 7 Regional offices to request and obtain their original copy of their Statistical record Document (Fiche d’Enregistrement Statistique) which is compulsory to be presented for any customs procedure.

For any import or export, traders must fill in advance a form, if payment is to be made or received in foreign currency, the form must also be presented to the bank and signed before it is given to the Chamber to be authenticated (date, stamp and signature).

The form, filed in and registered by the Chamber proves the trader’s intention to import or export certain goods. It replaces the old and complex procedures of livences.

This Single window is not computerized and is only manual.

**The Single Window for tracing movement of goods**

In order to keep record of goods moving across borders, the National Concil of Niger Users of Transport (CNUT, Conseil Nigérien des Utilisateurs de Transport) has developed a single window process.

It is also paper based, and consist in delivering for any transport of goods from or destined to or in transit via Niger, a Transport document that will follow all transport steps from departure (port) borders and destination.

Each carrier moving goods from any port to Niger must obtain at the CNUT local office the necessary transport document (Bordereau de Suivi des livraisons).

The single window concept is in that case limited to the unique location where documents can be obtained.
Annex 2: Some example of OSBP in Western Africa

OSBP have proliferated in Africa with different impacts. Many reports have been published on the issue such as the “One Stop Border Post Source Book” (First Edition in September 2011 by CDC, ICA, EAC and JICA) or recently the “Impact Assessment of the Northern Corridor Performance Improvement Activities” prepared for the Northern Corridor Transit and Transport Coordination Authority (NCTTCA).

They present in detail the results obtained and the conditions under which they were obtained and how corridors’ performance has been impacted by the improvement realized through a combination of trade facilitation policy and measures and concrete implementation of border crossing modern facilities.

As far as OSBP experience are concerned some examples may be quoted.

In the Context of the UEMOA regulation N°15/2009 dated 17 December 2009 establishing the legal status of Juxtaposed border post at the UEMOA Member States frontiers, several initiatives emerged. However, the operationalization is low and delayed.

On his side, the ECOWAS Commission has selected seven OSBP along the border of nine ECOWAS Member States; two are already functional Malanville (Benin-Niger) and Cinkansé (Togo-Ghana).

However, the results are far from reaching expectations due to lack of political support itself turning into poor coordination of efforts and controls.

The various assessments published confirm that successful implementation of OSBP is dependent if not conditioned by the political will and commitment on both sides of a border and if they are implemented in the context of a global vision oriented to trade and transport facilitation.
Annex 3: Dry Port, the example of the project of Dry Port of Ferkessedougou

In fact, Importers from Burkina are complaining about the long delays they face in the Ivory Coast ports to release their goods and have them delivered in Ouagadougou or elsewhere in Burkina.

On their side the Ivory Coast Authorities complain about the systematic overloading of foreign trucks delivering goods to the hinterland countries.

Based on these 2 observations, a project arose for the implementation of a Dry Port on the Ivory Coast territory were goods could be shipped from the Ports and where all process would be undertaken to allow their final delivery in Burkina. Ferké is distant from Abidjan by 575 Km and from San Pedro by 715 Km.

In practice it does not seem that any improvement will be achieved in terms of trade facilitation perspective (simplification, harmonization and reduction of logistics costs).

Indeed, goods passing through the Dry Port of Ferké with a final destination in Burkina Faso will be subject to additional procedures and requirements.

The customs perspective

Movement from the Port to the Dry Port

Goods arriving in the Ports (Abidjan or San Pedro) with a destination in Burkina Faso will have to go through the same processes and procedures as currently as these goods are not destined to Ivory Coast market, but to a foreign country.

However, the Dry Port of Ferké, being located on the Ivory Coast territory at more than 500 Km from Abidjan and 700 from San Pedro, and due to the fact that goods will be offloaded in Ferké, goods cannot be placed under the Regional TRIE transit system as it is a national transport. They must therefore be placed under national customs transit procedure which implies the involvement of a customs broker to lodge the transit declaration and organize payment for a transit guarantee.

Storage at the Dry Port

Goods arriving at the Dry Port will be transferred from the Customs Transit Procedure to another customs regime, and at this stage the National Customs Transit Procedure will be terminated and discharged.

The stationing of goods in the Dry port is subject to a temporary storage customs regime that is different from the transit procedure. It implies that the Dry Port Operator or the owner of the goods will have to place the goods under this temporary customs procedure, lodge the corresponding declaration and settle the cost of the related guarantee.

When goods will finally be ready for transportation to Burkina, the Temporary customs procedure will have to be closed and discharged while the goods will have to be transferred to another customs procedure to allow their transit in Ivory Coast in exemption of payment of taxes and duties.

Final delivery from the Dry Port to Burkina Faso
As Ferké is located on the Ivory Coast territory and distant from the border with Burkina Faso by about 90 Km the trader will have the choice to place the goods under one of the following transit regimes:

- Ivory Coast national customs transit procedure from Ferké to the Border and organize the import procedure and settlement of taxes and duties at the Burkinabé entry customs point
- Place the goods under a TRIE transit procedures that applies as per the ECOWAS Convention from 1982.

In both cases a corresponding Customs Transit declaration will have to be placed and a customs transit guarantee to be purchased.

**The Transport Perspective**

While Regional road transport is organized in the ECOWAS countries by the Convention on inter States transport from 1982 (not to be confused with the TRIE Convention of the same date), bilateral road transport relations are regulated by bilateral agreements in mine with the ECOWAS Convention.

Ivory Coast and Burkina Faso have recently renewed their Bilateral Agreement which clearly provides for the prohibition of *Cabotage transport and allocate respectively a 2/3 Transport Quota for Burkina operators and 1/3 for Ivory Coast Carriers for the transport of goods transiting by ports and a 50/50 quota for bilateral transport of goods.

Therefore, it implies that while Burkinabé Operators are very much vociferous in claiming the strict implementation of their transport quota, goods passing by the Dry Port of Ferké will widely escape from the Quotas.

Indeed:

- Transport form the Ports (Abidjan and San Pedro) to Ferké and vice versa are not international bilateral transport but domestic transport which by virtue of the bilateral agreement cannot be realized by Carriers from Burkina as cabotage is prohibited.
- Transport from the Dry Port to Burkina are bilateral transports but not subject to 2/3 – 1/3 quotas but to 50.50 quota principle as they are not any more transport consecutive to a transit in one port.

It seems however, that confronted with the consequences in customs and transport sides of the implementation of the project may be abandoned.
Annex 4: The impact of the Multiplicity of procedures and bad traders’ practices on corridors’ performance

Multiplicity of procedures and lack of harmonization in their implementation

Despite the existence of regional instruments aimed at harmonizing procedures and documents needed for regional movement of goods, often national requirements prevail over regional instruments even in the context of implementing regional instruments.

The topical example in particular in Western and Central Africa is the lack of recognition of a unique Consignment Note for inter States Transport.

As a result, instead of establishing one Consignment Note that accompanies the goods from the loading point to the destination and that is recognized throughout the journey, operators will have to obtain one consignment note for each country where the transport will pass by. Often, these documents are filled in at borders, requiring the involvement of a local forwarders thus implying time and cost that could be avoided.

The same goes for customs transit procedures. Despite the subscription of a TRIE transit document and guarantee at the port of arrival of the goods, in many cases, the transit document is not accepted at the next border where another transit declaration and guarantee have to be produced as it is the case in Niger, for example. This practice implies additional costs and delays border crossings.

In addition, the proliferation of GPS systems to geolocalize consignment on international corridors is contributing to complicate international movement of goods. Indeed, these GPS systems are developed nationally leading to this absurd situation that forces additional manipulations at borders to take out the device installed at departure and on the other side of the border, to re install a GPS for the new country to be crossed.

The cost for the trade is immense while security is not really improved due to the lack of Police means to intervene on the spot when a critical situation is detected.

Traders and importers’ practices are severely impacting the corridors efficiency

When analyzing the causes of delays in ports and at borders, it appears that the lack or the incompleteness of documents is one of the first cause for delaying the releasing of goods.

It also appears that Customs procedures are often delayed due to lack of available funds to either pay the taxes and duties or to purchase the Transit Guarantee.

Finally, after the release from the Port, additional delays are suffered due to the late payment of the transport cost due at the start of transport (in western Africa the practice consist in 50% payment at the start and 50% at delivery). This delay in paying transport cost impose additional delays outside the port areas as transport will start only after settlement of the due amount.

The tree causes of further delays are the result of a lack of anticipation on the side of importers who often are awaiting the arrival of the goods in the ports to start organizing the post maritime transport and related customs treatment and transport procedures.
Additionally, the lack of anticipation on the side of importers contributes also to aggravate the punctual lack of transport capacity. Indeed, when a ship arrives, often it is noticed that the road transport vehicle capacity is insufficient, while in reality, it is effectively insufficient at this very moment for a sudden massive need. Anticipation should contribute avoiding such situations and contribute to better fluidity of inter States transport.
MODULE 19 MULTIMODAL TRANSPORT TO ENHANCE COMPETITIVENESS OF THE AFRICAN FREIGHT LOGISTICS INDUSTRY

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Table of Contents
1 Introduction ............................................................................................................................ 4
2 Benefits of Multimodal transport in Africa................................................................. 5
  2.1 Analysis of the benefits to African multimodal transport Operators .................. 5
  2.2 Benefits to shippers ............................................................................................... 6
  2.3 Benefits to society and economy ....................................................................... 7
3 Status of multimodal transport in Africa ................................................................... 8
  3.1 East Africa ........................................................................................................... 8
  3.2 South Africa ....................................................................................................... 9
  3.3 West Africa ........................................................................................................ 9
4 Barriers hindering African freight forwarders from adopting multimodal transport in
   Africa ......................................................................................................................... 10
  4.1 Transport Infrastructure and related services ...................................................... 10
    4.1.1 Road & Road transport services ................................................................. 11
    4.1.2 Rail ............................................................................................................... 12
    4.1.3 Sea & Maritime ports ............................................................................... 12
    4.1.4 Inland waterways ...................................................................................... 13
    4.1.5 Dry ports and warehouses ....................................................................... 13
    4.1.6 Mode integration ........................................................................................ 13
  4.2 Legal and regulatory barriers ............................................................................. 13
    4.2.1 Legal barriers ............................................................................................. 13
    Table 2: UNCTAD/ICC Rules for Multimodal Transport Documents .............. 14
    4.2.2 Regulatory environment - non-tariff barriers ....................................... 16
  4.3 Institutional barriers ......................................................................................... 16
4.4 Human Capital.............................................................................................................. 17
4.5 Technology .................................................................................................................... 18
4.6 Insecurity and instability ............................................................................................. 18
4.7 Industry-related barriers ............................................................................................. 18
  4.7.1 Multimodal/freight forwarder related barriers ................................................. 18
  4.7.2 Unfair practices by shipping lines........................................................................ 18
  4.7.3 Poor choice of International Commercial terms ................................................ 19
5 Requisite Institutional, operational, legal and regulatory and professional environment for
development of Africa Multimodal Transport Operators ................................................... 19
  5.1 Institutional environment ............................................................................................ 19
      5.1.1 National level ......................................................................................................... 20
      5.1.2 Regional and continental ...................................................................................... 20
  5.2 Legal and Regulatory environment ............................................................................ 22
      5.2.1 Intervention on legal environment to support MT ............................................ 22
      5.2.2 Interventions on regulatory environment ........................................................... 24
  5.3 Banking & insurance.................................................................................................... 27
      5.3.1 Banking .................................................................................................................. 27
      5.3.2 Insurance services ................................................................................................. 27
      5.3.3 Credit referencing ................................................................................................. 27
  5.4 Overcoming restrictive trade practices within the industry..................................... 27
  5.5 Appropriate choice of commercial terms ................................................................... 28
  5.6 Human resource development ..................................................................................... 28
  5.7 Technology .................................................................................................................... 29
  5.8 Infrastructure................................................................................................................ 29
6 Spurring establishment of national private sector MTOs................................................ 30
  6.1 Information sharing ..................................................................................................... 30
  6.2 Training and professionalism...................................................................................... 30
      6.2.1 Training.................................................................................................................. 30
      6.2.2 Professional Conduct and management .............................................................. 30
  6.3 Partnership and joint ventures.................................................................................... 33
  6.4 Adoption of internationally recognized multimodal transport documents.......... 34
  6.5 Certification and accreditation.................................................................................... 34
1 Introduction

The international supply chain is key in connecting producers of goods and their buyers. The sellers and buyers (shippers) need to move goods from their current location to where they are required by the buyers, which necessitates transportation. Transportation of goods, especially where it is international (beyond the boundaries of a country) is subject to various laws and regulations. Moreover, transport and other related costs are key cost constituents of the value of goods at the point of consumption. Most shippers concentrate more on their core businesses while outsourcing transport services. Transport of goods (freight transport) entails several operations and services. The time and cost of moving goods from source to destination affect their competitiveness.

In Africa, freight transport cost remains high and is often cited as a major contributor to the low competitiveness of the continent in trade. The continent is largely reliant on road transport for conveyance of goods, especially for the intra continental traffic with other modes of transport that include sea, air, rail, inland waterways and pipelines carrying very little traffic.

Since the introduction of sea containers in 1950’s, combination of several modes of transport to convey containerized cargo from origin to destination took root with intermodal and multimodal transport services being more prevalent. Under intermodal transport, containers are transported using successive modes of transport with each carrier taking responsibility only for the portion he performed himself. Containerization and globalization made it convenient to have one transport operator for the entire transport process leading to development of Multimodal transport (MT). MT entails door-to-door movement of goods from one country to another using at least two different modes of transport under the responsibility and supervision of a single operator. It is defined as “the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator (the MTO) to a place designated for delivery in a different country” (Art. 1 of the United Nations Convention on International Multimodal Transport of Goods). The MTO contracts with the owner of the goods (shipper or consignor) for the performance of the door-to-door service thus assuming full responsibility under a single contract.

MT is therefore a holistic cargo transport solution to shippers. It is becoming increasingly popular and preferred across the world to provide a single but complete transport solution for goods. Usually, MT contracts are time and price fixed. The MTO may choose to outsource all or part of the various services required to successfully execute the MTO contract such as carriage, handling, warehousing, customs clearance etc. MTOs operate as Non vessel Operating Multimodal Transport Operators (NVO-MTOS). Multimodal transport operators combine advantages of the various modes to provide the most competitive door-to-door transport solution.

The uptake of MT transport remains relatively low in Africa despite its many advantages. Africa should make efforts to entrench MT services by providing a conducive environment for it to thrive. Appreciation of the advantages that the continent stands to gain from investment in MT should awaken and encourage stakeholders to take the necessary actions and grow this service in order to harness the benefits.
2 Benefits of Multimodal transport in Africa

2.1 Analysis of the benefits to African multimodal transport Operators

- **Increased business volume for MTOs** - The very fact that the MTOs contract with shippers to undertake the entire door-to-door service implies larger business volumes for the MTOs.

- **Competitive rates by service providers** - freight forwarders offering MTO services are able to negotiate competitive rates with the carriers and other service providers that they sub-contract since the MTOs are well established, control the cargo and better understand the freight logistics industry. They also enable establishment of long-term business relationships with the service providers and therefore better rates.

- **Opportunity for African freight forwarder to participate more in international freight logistics** - since an MTO plays more of a coordination role hence not often performing actual carriage. MT gives African freight forwarders a better opportunity to provide their services internationally thus increase their significance in international logistics market.

- **Opportunity to provide door-to-door service without performing actual carriage** - MT allows African freight forwarders, especially those not well resourced to provide carriage and other services, to provide carriage services by outsourcing and contracting carriers.

- **Flexibility** - African freight forwarders providing MT services have the advantage of assuming full control of the goods hence more flexibility in the management of cargo. As a result, they are able to make decisions that are more optimal with respect to transport planning, routing, choice of carriers and other service providers.

- **Combination and optimization of advantages of the various modes** - as MTOs, African freight forwarders will have the opportunity of determining the mix of transport modes to use for optimal service delivery. This enables them to remain competitive.

- **MTO has sole right of disposing the goods** - MTO reserve the sole right over the goods and can exercise lien. African MTOs will enjoy this right hence further insulating themselves in execution of the MT contracts.

- **Formalization of engagement** - since an MT contract is evidenced by a contract, freight forwarders from Africa adopting MT will be assured that their contractual relationships with shippers are formal with clearly spelt out rights, obligations and liabilities. This insulates them in case of contractual disputes that may arise as is common with semi-formal contracts prevalent in the Africa especially with small and medium sized freight forwarding.

- **Improvement of service delivery** - The quality of services is largely pre-determined in the MT contract. Consequently, MTOs find themselves obliged to formalize their contract with the service providers they enlist and commit them to adhere to agreed service standards. In turn, the MTOs are able to return better services to the shippers.
• **MT helps African freight forwarders insulate themselves from effects of regional integration** - As regional integration takes root in Africa and non-tariff barriers to business eliminated, cargo clearance activities at borders are being scaled down and similarly the role of freight forwarders. MT provides an opportunity for freight forwarders to provide services across borders thus positioning them to mitigate the shrinking business.

• **MT helps freight forwarders mitigate loss of business occasioned by automation** - Whereas increased automation of cargo clearance processes is welcome, freight forwarders who hitherto operated with labor-intensive and largely manual system find themselves with reduced roles. This translates into reduced significance of African freight forwarders and by extension shrinking of their market. MT offers African freight forwarders the opportunity to re-orient their businesses thus allowing them to provide a wider range of services across borders.

• **Better asset utilization** - MT enables optimization of transport infrastructure and assets thus securing optimal returns. This will allow African freight forwarders to optimally deploy their assets hence higher return on investment.

• **MT will position African MTOs to compete with international MTOs** - African freight forwarders adopting MT will be able to compete with the well-established multinational MTOs.

• **MT to improve the reputation for African freight forwarders** - The reputation and image of African freight forwarders especially, the small and medium enterprises, have not been very good. Those keen on providing MT services will have to adopt best practice and this will inevitably improve their image and reputation.

• **MT industry will impact positively on the entire freight transport industry in Africa** - Since development of a strong MT industry in Africa will entail improvement of infrastructure, human capital, and legal and operating environment, the entire African transport sector will reap from the improved environment. All service providers will inevitably have to up their games in order to play in the multimodal transport industry.

• **Development of regional logistics hubs** - MT industry has potential to spur development of competitive logistics hubs especially at the continent’s sea ports. This will increase the volume and mix of cargo traffic through the port thus expanding the business opportunities for African freight forwarders.

### 2.2 Benefits to shippers

• **Competitive freight rates/reduced cost** - By dealing with one service provider (MTO), shippers stand the advantage of negotiating composite competitive freight rates for the entire service. It costs shippers more when they have to deal with several service providers.

• **Pre-determined freight** - MT enables shippers to know the actual cost of delivering the goods at the point of contracting. This helps them in planning thus avoiding numerous additional bills that come along the way when using disjointed services.
• **Single contract** - The contractual obligations of the shippers are stipulated in the single MT contract signed with the MTO. The single MT contract saves the shipper the obligation to fulfill several contracts that is usually the case when using disjointed services.

• **Reduced and Simplified documentation** - MT reduces the documentation required by the shippers in getting the goods move from origin to destination. Under MT services, a shipper signs a single contract with the MTO that secures performance of the entire door to door service.

• **MTO bears full responsibility** - The fact that MTO assumes full responsibility of the door-to-door delivery of the goods is a big relief to the shipper. The shipper does not therefore need to monitor and coordinate the movement of the goods across the transport chain as it is the case with other types of services.

• **Predetermined service standards** - The shipper is assured of a pre-determined quality of services based on the contract. The MTO ensures all the sub-contractors enlisted to provide various services for the successful performance of the MT contract live up to agreed service commitments. This is not always the case if the shipper has to deal with several parties for delivery of the goods.

• **Transport advisory services** - The MTO acts as the advisor of the shipper on matters relating the cargo on transit.

• **Single contact point** - The MTO becomes the single contact point for the shipper with respect to the goods.

2.3 Benefits to society and economy

• **Reduced environmental impact** - MT is beneficial to Africa’s economies as it seeks to optimize on the benefits of the various modes. It combines advantages of the various modes taking advantage of those that are more environmentally friendly such as rail and sea. In addition, MTOs often demand that carriers and other service providers enlisted comply with applicable laws in the territory where the service is delivered as a way of safeguarding successful performance of the contract. The MTO may for instance demand enlisted truckers to comply with the 7-pillar audit, which requires road transporters to comply with environmental sustainability requirements.

• **Traffic safety** - MT contributes to traffic safety given that the MTO, having taken full responsibility of the door to door service, is obligated to ensure compliance and failure to do so may render him liable for negligence hence jeopardizing his business. This means the MTO must vet the carriers for their reputation and safety is a key consideration.

• **Sustainable use of transport infrastructure** - By combining several modes of transport, the choice primarily being premised on their competitive advantages, MT contribute to sustainable use of transport infrastructure. For overweight cargo, MTO would for instance, prefer
combination of mode that uses more of sea, rail and inland waterways modes as opposed to road.

- **Lower transport cost hence reduced consumer prices** - Lower freight charges offered to the shippers by MTOs should translate into reduced consumer prices and competitiveness of trade in Africa.

- **Technological transfer** - MT is heavily reliant on technology. By African freight forwarders opting to use MT more, technology transfer is likely to happen as the Africa MTOs are obligated to maintain service standards necessary to perform MT contracts to international standards. Moreover, African MTOs will have to work very closely with international MTOs and partner service providers and this opens an avenue for technology transfer.

- **Spurring infrastructure development** - increased uptake of MT services will spur development of transport infrastructure as demand for alternative modes of transport rise. This will save Africa from over reliance on road for freight transport.

- **Human skills development** - Provision of competitive MT services demands availability of competitive and efficient carriage and related services. This in turn triggers demand of skilled labour and this has potential to cause investment in human capital development.

### 3 Status of multimodal transport in Africa

Despite the obvious benefits, the uptake of MT by Africa Freight forwarders remains low and it hardly commands a sizeable portion of the freight transport industry. Most of the freight forwarders provide segmented services such as carriage, customs brokerage, warehousing etc. but rarely opt for holistic MT services. The following is a brief review of the MT industry in several African regions.

#### 3.1 East Africa

The uptake of multimodal transport in East Africa remains relatively low and is dominated by large multinational companies such as Bollore, Kuenhe+Nagel among others. Some of these are well connected to suppliers internationally. Some shipping lines in Kenya previously provided door to door services. Upon discharging cargo from vessels at the port of Mombasa, it was railed to an Inland container depot in Nairobi from where road haulers were sub-contracted to deliver it to the premises of the consignees within Nairobi. This however faced a lot of resistance from indigenous freight forwarders contending that shipping lines were encroaching on their market. This was one of the main reasons why shipping lines resorted to focus more on their core business of sea carriage. Some have since tried to establish separate local freight logistics firms or even entered into partnership with existing freight forwarding firms that provide required services upon discharge at the sea port. Some of the multinational freight forwarders, which were for long well known representatives of major shipping lines, have partnered with their partner lines to provide door to door services though not always on MT basis because of the unpredictable environment. In Tanzania, freight forwarders successfully lobbied government to protect local customs agents and freight forwarders from
encroachment of the logistics service market from shipping lines. As a result, shipping lines are not allowed to participate in cargo clearance and logistics within Tanzania. There are also a few African firms that have ventured into multimodal transport. One of them, a Uganda owned and registered firm (Graben 4PL) specializes in 4PL services\(^1\). The company’s services include management of service providers, freight contract management, warehouse management, consolidated/single transport billing, freight negotiation with 3rd part logistics providers etc. Though this is a relatively young firm, it is one of the most progressive and promising. “Acceler Logistics” is another indigenous firm that provides door-to-door services through global network partnership. The company was established mid 1990s as a small customs agent and freight forwarding firm but has grown to become one of the biggest freight logistics service provider in Kenya and the wider East African region. Once the firm secures a door-to-door contract with the shipper, it is responsible for procuring the various services including carriers up to destination. The company has a wide network of partners across the globe and this makes it easy for it to serve many parts of the world where it has no presence. Its biggest asset is the global network of partners. However, most African firms tend to focus more on local and regional traffic, often assuming responsibility upon arrival of the cargo at the regional sea ports. Often, they use only one mode of transport (road) owing to unavailability of other modes.

A study on multimodal transport in Uganda (USAID REDSO 2001), though fairly old, indicated very low uptake of MT and cited very low levels of awareness, infrastructure, legal and regulatory constraints as key barriers. These barriers were largely replicated across East Africa and the rest of Africa and still persist.

3.2 South Africa

In Southern Africa, multimodal transport is more developed especially in South Africa but the industry is still largely dominated by international multinational freight logistics firms such as Bolloré and DHL Logistics among others. The multinationals rely on their wide global establishment and presence to provide MT services. There is relatively bigger participation of Indigenous MTOs in the MT industry. Most of the African MTOs tend to leverage on joining global networks and establishing networks while capitalizing on the considerably good transport infrastructure. The fact that South Africa is the main manufacturer and supplier of goods for most of the Southern African countries all contributes to the growth of MT industry. Concargo (PTY) Ltd South Africa is one indigenous South African freight logistics company that is providing multimodal transport services in the Southern Africa region. The company markets its MT services on the platform of reducing costs and providing a single door to door transport solution to shippers. It is connected to global freight logistics networks.

3.3 West Africa

Development of multimodal transport is not much different in West Africa from the rest of Africa. The region suffers the same perennial infrastructure, legal regulatory etc. problems similar to other

\(^1\) “Fourth party logistic services”; these companies provide a full range of services from order processing and inventory management to transportation and other services such as warehousing, Customs clearance until the final destination.
parts of the continent. Most of the freight forwarders engaging in MT are multinationals, with international networks and often securing their business from large international shippers.

4 Barriers hindering African freight forwarders from adopting multimodal transport in Africa

The *World Bank Doing Business Report 2016*, shows a very dismal performance by nearly all African countries in trading across borders. Out of the 189 countries ranked, the last country (Eritrea) is from Africa. Even the leading economies of continent: such as South Africa, Kenya and Ghana performed poorly at positions 130, 131 and 171 respectively. The report assesses import/export documentary compliance, border compliance and domestic transport. These are fundamental considerations that MTOs bear in mind when deciding whether or not to engage on MT basis.

While multimodal transport has great potential to reduce overall transport costs, contribute to the overall social-economic and support environmental sustainability in Africa, its slow uptake by African freight forwarders continues to undermine and limit access to the potential benefits. This begs the question why Africa is not embracing MT compared to other parts of the world. It is therefore important to review the challenges that deter the growth of multimodal transport among Africa freight forwarders.

It is obvious that, while many freight forwarders may be desirous to embracing MT, they shy away. Partly, this could be because MT imposes strict contractual obligations and responsibilities to the MTO yet the operating environment is often unpredictable and faced with many barriers hence undermining the capacity of the MTOs to successfully deliver their MT obligations. The operating environment is unpredictable and freight forwarders prefer not to take the risk under these circumstances. To circumvent this, freight forwarders opt to provide segmented freight logistics services that come with limited obligations and responsibility. Accordingly, freight forwarders provide and charge for each service separately instead of providing total logistics solutions. The services include customs brokerage, warehousing, transportation, insurance, documentation, cargo handling etc. The challenges alluded to above are largely related to infrastructure, legislation regulation, human capital, technology, industry-related barriers and generally restrictive operating environment. The following is a brief analysis of these challenges.

4.1 Transport Infrastructure and related services

The supply of transport infrastructure in Africa is inadequate both in both quantity and quality. Infrastructure for all modes of transport fall below the demand level. This limits the opportunity to exploit the competitive advantage of the various modes; a key consideration of MT services. Below is a qualitative comparative analysis of various modes.

<table>
<thead>
<tr>
<th>Quality criteria</th>
<th>Road</th>
<th>Rail (wagon load)</th>
<th>Rail (unit train)</th>
<th>Inland waterway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Very high</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Door-to-door potential</td>
<td>Very high</td>
<td>Low</td>
<td>Very low</td>
<td>Very Low</td>
</tr>
<tr>
<td>Reliability</td>
<td>Very high</td>
<td>High</td>
<td>Very High</td>
<td>High</td>
</tr>
</tbody>
</table>
Table 1: Qualitative assessment of transport in containers by different modes of transport

<table>
<thead>
<tr>
<th>Security</th>
<th>Very high</th>
<th>High</th>
<th>Very high</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>High</td>
<td>Very high</td>
<td>Very high</td>
<td>Very high</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Very high</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Availability</td>
<td>Very high</td>
<td>Low</td>
<td>Low</td>
<td>Very low</td>
</tr>
<tr>
<td>Ecological friendly</td>
<td>Very poor</td>
<td>High</td>
<td>High</td>
<td>Very good</td>
</tr>
<tr>
<td>Energy efficiency</td>
<td>Very low</td>
<td>High</td>
<td>High</td>
<td>Very high</td>
</tr>
</tbody>
</table>

Multimodal Transport Handbook for officials and practitioners, UNCTAD -1996 - To date the qualitative comparative analysis of the various modes remains unchanged.

In determining the various modes to be deployed to perform an MT service, an MTO considers the various aspects of quality criteria and settles for a combination that is most competitive.

Below is a review of infrastructure challenges that undermine multimodal transport in Africa.

4.1.1 Road & Road transport services

The quantity and quality of road pavement in Africa is insufficient to meet the demand for freight transport. This is further compounded by other operational barriers. Road transport is the main mode that links most of the corridors in Africa. Examples of these corridors include the Northern and Central corridors of Eastern Africa, the Abidjan-Lagos corridor, Walvis Bay corridor etc. Most of these corridors originate from the sea ports connecting the rest of the continents. The quality of road infrastructure along these corridors is considerably good compared to the rest of the road network. The qualitative and quantitative supply of road infrastructure varies from country to country. There are also other challenges, which largely tend to be widespread across the continent. Some of these barriers include road congestion especially in urban areas, lack of sufficient roadside parking and resting facilities, poor border crossing infrastructure, poor positioning of weighbridges that interfere with smooth flow of traffic. Poor border crossing infrastructure has been one of the more serious problems. In Eastern and Southern Africa, establishment of one-stop border posts has eased traffic flow on some key borders.

Some African countries have relatively better supply of road pavement of the quality and capacity to carry sea freight containers. South Africa leads on this front and this has enabled better connectivity to other countries in the region. Many parts of the continent are not connected by quality roads that would allow loaded sea containers to move seamlessly across several countries to the final point of delivery. In some cases, containerized cargo is repacked in smaller units to enable delivery to the consigned premises thus interfering with the original unit of carriage. Often, roads are not well connected to other modes of transport.

The road transport industry is already carrying the bulk of containerized cargo in Africa, whether or not under MTO arrangement. The sector thus has relatively good capacity and is ready to support development of an African MT industry subject to the operating environment being improved.
4.1.2 Rail

This mode of transport is largely unavailable in Africa. Dilapidated rail lines, obsolete rolling stocks and aging rail infrastructure is a common feature in Africa. By 2009, 17 African countries did not have railway lines including Burundi and Rwanda in East Africa. Moreover, Africa was using nine (9) different gauges of railway lines (UN-ECA 2009). Many of the Continent’s rail lines were constructed during the colonial era and have since been run down with no additional investment. Some of the more recent lines constructed in 1970s include Tazara, Trans-Gabonese and Trans-Cameroonian but targeting mining industries. South Africa has better rail infrastructure. The country boasts of having more than 70% of Africa rail network and connects to neighboring countries of Namibia, Botswana, Mozambique and Zimbabwe. Even for countries with relatively good rail system, they have limited network. In East Africa, Kenya, Uganda and Tanzania had their rail constructed in the late 1880’s and early 1890’s. Rail was then the main mode of moving goods from the sea ports into the hinterland yet today rail hardly commands 5% of the cargo traffic. Low investment in this mode and poor service delivery by railway service providers has rendered this mode virtually unavailable to freight forwarders. There is presently huge investment in trucks by freight forwarders and road transporters, who are not keen to support railway development as this would compete with their trucks. However, many governments in African are now giving greater attention to railway development. The proposed construction of a standard gauge railway network in East Africa is a case in point with the section from Mombasa to Nairobi already under construction.

4.1.3 Sea & Maritime ports

Ports are important nodes through which cargo is converted from the sea mode to other modes and as well to sea mode in case of transshipment. Availability of efficient ports with capacity to service large modern day vessels is essential. The ports must be well connected to other modes to ensure speedy delivery and evacuation of cargo in and out of the port. Performance of most African ports, though improving gradually, remains relatively low and connectivity to other modes is less than desired considering the prevalence of other factors that affect transport such as congestion of vehicles in ports’ environs e.g. port of Mombasa and Dar es Salaam. The port of Durban, the leading sea port in Africa, continues to record one of best good performances among African ports. The starring performance points to the potential African ports have of becoming efficient freight logistics hubs that offer optimal services with capacity to service bigger vessels and facilitate faster vessel turnaround. Efficiency in service delivery and optimal connectivity to road and rail network are the key pillars against which the port of Durban has excelled. As a result, some countries situated far away opt to route their cargo through Durban port as opposed to using other ports with closer proximity. Fortunately, many African countries with sea ports are now investing heavily to increase the capacity and productivity of their ports. For instance, the ports of Mombasa and Dar are currently undergoing major expansions to expand their capacities and improve their connectivity to other modes of transport.

Unpredictability and unreliability of the port services discourage the preference of MT services since service providers are uncertain to meet their contractual obligations because sea ports are critical to performance of multimodal services.
4.1.4 Inland waterways

Inland waters in Africa are largely underdeveloped and unexploited to provide an alternative transport mode for cargo. Even for a country like Egypt that has a comparatively better developed inland water transport through river Nile, it hardly moves 10% of freight by this mode. While terrain in some parts of the continent may be prohibitive, the continent has several lakes and rivers, which if tapped, have great potential for cheap and environmental friendly inland water transport services for freight. Most of these water masses are either not well navigated or not navigated at all e.g. lakes Victoria, Tanganyika etc. Most don’t have ports that are well resourced to support freight transport not to mention lack of/poor connectivity to other modes of transport. The mode is therefore largely unavailable to support MT services.

4.1.5 Dry ports and warehouses

The supply of inland dry port is insufficient. Investment in this area is often discouraged by poor connectivity to the various transport modes and low cargo volumes not to mention the regulatory regime. The positioning of dry ports and warehouses must be strategically planned to ensure speedy and efficient transfer in between sea, rail and road modes. To avoid traffic congestion near the sea ports, dry ports and warehouses should be located reasonably far off from the sea ports but connected with efficient transport. Dry ports and warehouses should also be situated into the hinterland with a view to spurring establishment of logistics, consolidation and distribution hubs. They must however be connected to the various modes of transport and equipped with adequate handling capacities for containers and other cargo.

4.1.6 Mode integration

Since MT uses more than one mode of transport, it is critical that the various modes of transport are well integrated for seamless movement of freight from one mode to another without requiring to interfere with the weight and the dimension of the original unit of carriage. The sea ports, dry ports and indeed all the nodes where change of mode is done must have sufficient capacity for serving the various modes connecting through them and handling cargo. Lack of integration has greatly undermined development of MT in Africa.

In Mombasa and Dar, inbound containers are offloaded from sea vessels and kept within the port or loaded onto to trucks or rail wagons for evacuation to dry ports where they are cleared to the various destinations. Most of the dry ports are solely connected by roads with very few having rail connectivity. They are however equipped with handling equipment. Cargo from the dry ports destined for onward transportation by rail or by sea is therefore trucked to the rail and terminals. Rail sidings should be considered for dry ports.

4.2 Legal and regulatory barriers

4.2.1 Legal barriers

A. Lack of requisite legal framework
By its very nature, MT entails a service provided across two or more national territories by a single service provider mostly through third parties all the way to the final destination. Yet countries have their own unique laws and regulations on freight transport and other related issues and these vary from country to country. The nationality of MTO, the cargo owner and service providers enlisted by the MTO is often different. The applicable legal jurisdiction for contracts drawn between the various parties is therefore a matter of concern. Moreover, dispute resolution becomes tedious and expensive. Africa lacks appropriate legal frame to support MT services. Indeed, most African countries lack integrated national transport policies and fail to fully legally recognize MT. Globally, the UN Convention of 1980 MT, which sought to provide a common legal framework has not come into force following failure by the critical minimum number of countries to ratify it. A few African countries including Malawi, Morocco, Rwanda, Senegal and Zambia are among those few who already ratified it. In absence of the Convention, UNCTAD/ICC Rules for Multimodal Transport documents provide a guide that can be adopted. The rules are summarized below.

| 1. Applicability |
| 2. Definition |
| 3. Evidentiary effect of information contained in Multimodal transport documents |
| 4. Responsibility of multimodal transport operator |
| 5. Liability of a multimodal transport operator |
| 6. Limitation of liability of multimodal transport operator |
| 7. Loss of the right of multimodal transport operator to limit liability |
| 8. Liability of the consignor |
| 9. Notice of loss of damage to goods |
| 10. Time bar |
| 11. Applicability of the rules to the actions in tort |
| 12. Applicability of the rules to the multimodal transport operator’s servants, agents and other persons employed by him |
| 13. Mandatory law |

Table 2: UNCTAD/ICC Rules for Multimodal Transport Documents

**B. Road transport service**

Most African Countries have legal and regulatory requirements that tend to restrict cross border operations of road transport services. Some of these barriers include licensing, vehicle insurance requirements, fees, routings etc. In a way, these tend to discriminate road transport service providers who are not nationals. Moreover, road transport service providers have to comply with different laws and regulations in each country they traverse. There are also restrictions that relate
to trucks e.g. some countries use right-hand in driving while others are left-handed. In some countries, trucks that carry transit cargo are not allowed to convey cargo that is destined within the country and this restricts their productivity leading to high transport cost. Differences in axle load requirements in different countries is a big challenge facing the trucking industry as truckers are required to adhere to different weight requirements in each territory they traverse. This is cumbersome, time consuming and may lead to interference with the original unit of carriage as weight is adjusted to comply with requirements in different countries. The alternative is to carry less than the optimal payload, which increases the cost of transport. This discourages multimodal transport.

C. Other legal barriers – Banking, insurance and finance

There are a host of other legal barriers across Africa that undermine proliferation of MT in Africa. Key among these are restrictions are on insurance, banking and financial services. These are crucial auxiliary support sectors for the MT industry.

A thriving MT industry sector requires robust banking and insurance sectors. Since MT services are cross border in nature, there should be supply of banking and insurance services with corresponding cross border geographical stretch.

Banking and insurance industries are highly regulated in most African countries. Restrictive legal environment undermines the capacity of banks and insurance firms to offer services across borders. Most banking and insurance service providers operate nationally and their services do not fully respond to the needs of MTOs. For instance, insurance bonds and bank guarantees issued to cover goods under customs control are only valid nationally thus requiring fresh execution in each and every country that cargo passes. Restrictions on transfer of funds and foreign exchange control have not made the situation any better. There is however increased relaxation of controls on these services in many countries with regional integration playing a big role in opening up regional markets.

For long, banks and insurance firms in Africa did not embrace transport as a key market niche for which to develop specific products and services. This is partly the reason why marine and other insurance covers for in-bound cargo are often procured from international insurance companies. Easy access of these services from African banking and insurance industry would enhance the appetite to take up MT services.

A few leading African banks and insurance firms have repositioned themselves for the freight transport industry by developing services targeted at the industry. Some are also expanding their operations across borders such as Eco Bank. The African Trade Insurance Agency (ATIA), a multilateral financial institution providing export credit insurance, political risk insurance, investment insurance and other services is an example of possible initiatives that African MTOs could use to cover cross border risks. While tremendous progress has been made in addressing some of these issues and much is happening, the restrictions still discourage growth of multimodal transport.
4.2.2 Regulatory environment - non-tariff barriers

In the implementation of various laws and regulations relating to the movement of goods and people, many non-tariff barriers (NTBs) emerge and these vary from country to country. These contribute to freight transport inefficiency making the operating environment unpredictable and less attractive to MT operations. Below is a highlight of the most significant aspects of non-tariff barriers.

- **Customs operations** - Customs administrations globally have four key roles namely revenue collection, safety, security and trade facilitation. There is a global drive to make trade facilitation a priority for Customs administrations and this is a key agenda of the World Customs Organization (WCO) as outlined in the Revised Kyoto Convention (RKC) and the World Trade Organization (WTO) through the Bali agreement on trade facilitation. In Africa however, most Customs administrations tend to focus more on revenue collection. This could be attributed to the fact that most governments in Africa heavily rely on customs-based revenue to finance their national budgets contrary to the practice in the developed nations that do not consider customs as a major source of revenue. This is compounded by compliance challenges on the part of business. As a result, Customs administrations impose stringent and cumbersome controls that impede free flow of cargo. This is especially so at ports and the borders. Some of the controls include physical cargo verification, physical cargo escort, heavy human intervention, overreliance on physical documentations and duplicated processes and procedures, low use of risk management etc. These controls render the operating environment unpredictable thus discouraging MT.

- **Other regulatory agencies (ORAs)** - there are other government regulatory agencies that have interest in goods conveyed through the international transport systems. These agencies are mostly concerned with safety, security, standards, trade etc. and often operate with independent legal mandates. The roles of some of these agencies overlap and in most cases their operations are not coordinated to ensure efficiency in the discharge of their functions. Consequently, delays and unnecessary unplanned costs arise as cargo is moved through different countries. This discourages MT services, as operators are unsure of the time and cost it will take to discharge MT contracts.

Commendable efforts have been recorded all over across Africa by Regional Economic Communities (RECs) and individual countries to eliminate the NTBS but the barriers still persist to disrupt flow of freight.

4.3 Institutional barriers

A. For a multimodal planning approach

Despite the many infrastructure and regulatory challenges culpable for hindering development of a robust multimodal transport industry in Africa, institutional weakness remains one of the key underlying problems. Institutional capacity is essential in addressing all the other issues that bedevil the freight transport industry. The main institutional weaknesses can be summarized as ‘the absence of any sector-wide strategic planning body, ineffective regulation of transport
service providers, excessive aid dependency, and inadequate implementation capacity’ (African Transport Infrastructure - World Bank 2011). Most African countries lack an overall strategic institutional arrangement for overseeing planning and management of the transport sector. It is such institutions that should advise and guide governments on the simultaneous development of all modes, integration, regulation and proper transport management. As a result, many countries lack a champion to drive development of integrated national transport policies and plans. Majority are slowly waking up to the need of addressing transport issues hence institutional reforms. The same public sector institutional weaknesses characterize the Regional Economic Communities (RECs) and continental levels. Fortunately, most RECs have recognized the importance of freight transport and have included this as one of their key areas of cooperation.

Most African countries tend to invest more in some modes while giving very little attention to others modes. This has led to near-neglect of some modes in terms of investment, promotion and regulation. As a result, there is sparse development of the various modes thus undermining the opportunity to use MT owing to unavailability of some modes. This, according to Africa Transport Infrastructure-World Bank 2011, results in unfair mode competition. This has largely contributed to the near collapse of rail and inland water transport modes in Africa.

B. For a freight transport industry competitive

The freight transport industry is often not well organized and lacks institutional capacity to contribute effectively to the national/regional/continental transport agenda and monitor implementation of transport policies. The private sector is often segmented along mode lines and often exhibit competition behavior. Private sector associations are generally ineffective in dealing with matters relating to professional ethics, skills development and other issues on private sector development.

4.4 Human Capital

There is inadequate supply of skilled labour to the freight forwarding sector in Africa. This may be attributed to the fact that freight forwarding is never considered as a profession and most of those working in the industry have learnt the trade on the job. Over time however, freight forwarding has evolved and the demand for high quality and specialized services is on the rise. Most countries lack elaborate programmes for training labour for this sector, with majority of institutions that come in to bridge the gap offering training interventions that do not respond to the demand. The skills and expertise shortage affects both the industry and the public institutions responsible for governance of the transport freight sector in Africa.

In the recent past however, human capital development is gaining more attention. Some universities and higher institutional of learning in Africa are focusing more on the transport with some learning institutions in South Africa, Kenya, Tanzania among others already offering industry-related courses at different levels. Collaboration of industry players with the learning institutions to develop need–based training interventions is also taking root. Bandari College and Jommo Kenyatta University of Agriculture and Technology both in Kenya and the Institute of Tax Administration in Tanzania are some examples.
4.5 Technology
Technology is a key enabler for MT. Technology is required in conveyance, handling, communication, payment, tracking among other uses. Many parts of Africa are lagging behind in communication connectivity hence limiting flow of information between the various actors involved in MT. Low supply of communication-related infrastructure remains a key barrier. Adoption of Intelligent Transportation Systems (ITS) by Africa MTOs will enable them leverage on technology to make optimal and informed decisions on transport planning and management. ITS technology will also assist in proper management of freight transport.

4.6 Insecurity and instability
In some cases, instability and insecurity have contributed to undermine growth of multimodal transport in Africa. If any sector of the journey or area that forms the route of cargo between origin and destination is in conflict or is unstable or deemed insecure, MTOs are unsure that they can guarantee safe and secure delivery of the goods consistent with MT contract. Considering that the MTOs are usually not domiciled and present is most of the countries that such cargo passes, they shy away from signing MT contract to avoid taking up contractual obligations while faced with a hostile environment.

4.7 Industry-related barriers

4.7.1 Multimodal/freight forwarder related barriers
The freight forwarding industry is not well developed in most African countries. It has for long been viewed informally and casually. Little effort has gone towards training and professionalization. Professional ethics have not been given prominence. Networking and partnership among freight forwarders in different countries is low. The industry in Africa is dominated by many small and medium sized firms that have limited capacity to provide services, partner and network. The above does not position African freight forwarders for the uptake of MT, which necessitates better organization, investment in communication technology, skills development, reputation improvement and business networking.

4.7.2 Unfair practices by shipping lines
International shipping lines operating in Africa have impacted negatively on the growth of African MTOs. In some regions and countries such as East Africa, shipping lines impose unfriendly business terms and conditions. For instance, shipping lines in many cases, require cash deposits before they can release containers to freight forwarders. Most of the African freight forwarders do not have the huge financial resources to put up the deposits. Bearing in mind that the MTO assumes full responsibility for the door to door delivery of the shipment, the responsibility to provide the cash deposit for the containers rests with him. This discourages freight forwarders from engaging in MT services. While shipping lines have genuine concern of securing their commercial interests in safe and timely return of their containers, it is imperative that the measures adopted are unfriendly and restrictive to business. Options exist for using insurance container guarantees, bank guarantees and
other soft securities. Moreover, the container security demanded by the shipping lines should be risk-based thus low risk customers should operate with nominal security or none at all. Establishing an enabling environment for MT industry in Africa will also scale down the need for container security as legal and industry standards take root.

4.7.3 Poor choice of International Commercial terms

International Commercial Terms (INCOTERMS) are widely used in international trade and assist in determining which party between the buyer and seller is responsible for transportation of the goods and therefore the corresponding responsibility. They also identify the point at which transit risks shift from the seller to the buyer. Poor choice of INCOTERMS, in some cases, may limit viability of executing an MT contract. Since MT entails a single door to door transport service contracted between the consignor (the party contracting the MTO or shipper) and the MTO, it implies that the consignor must be in charge of the goods from origin to destination. As such, INCOTERMS that do not assign responsibility of moving the goods from origin to destination to one party limits the potential to enlist MT services. INCOTERMS such as FOB, FAS, CFR and CIF are not favorable for MT while EX-w, CPT, CIP, DAP, DAT and DDP\(^2\) are suitable for door to door service hence ideal for MT.

5 Requisite Institutional, operational, legal and regulatory and professional environment for development of Africa Multimodal Transport Operators

The growth of a thriving MT in Africa primarily requires an enabling environment with a high degree of predictability and certainty.

As such, the highly bureaucratic environment that characterize the freight logistics industry in Africa must be addressed. Business processes must be simplified and reduced leaving only the essential controls, processes, procedures and documentation. Focus should shift to encouraging compliance by the logistics industry rather than enhancing control by government regulatory agencies. Modern ways of risk management must be deployed and technology exploited to address many of these issues. Addressing these barriers will prepare the ground for the off take of the African MT industry.

For Africa to reap from MT, bold decisions and actions are necessary at country, REC and continent levels. Below is an analysis of proposed interventions to remedy these barriers.

5.1 Institutional environment

Strong institutional capacity is critical not only for the development of an African MT industry but for the entire freight transport industry. It is the institutions that set and drive the transport industry’s agenda without which the situation is unlikely to change. Institutional capacity must be beefed up at national, REC and continental level and must include both the public and private sector. The following recommendations are targeted towards strengthening the institutional environment.

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\(^2\) FOB- Free On Board, FAS-, CFR- Cost and Freight, CIF – Cost, Insurance and Freight, EXW – Ex works, CPT- Carriage Paid TO, CIP- Carriage & Insurance Paid To, DAP- Delivery At Place, DAT-Delivery At Terminal and DDP- Delivery Duty Paid
5.1.1 National level

- **National transport institutions** - These should be established, if they do not already exist, in all African countries and properly equipped with the requisite capacity to discharge their mandate. The institutions should be well structured to ensure proper planning, implementation and monitoring. It is important that the overall coordination be anchored under one ministry/organization. This is to ensure coherence and convergence with the overall national transport policy and plan in countries that prefer decentralized institutional set up.

- **Comprehensive national transport policy** - Each country should have a comprehensive national transport policy and plan. These should guide the national transport institutions in discharging their mandates. The policy should cover the whole spectrum of relevant issues such as infrastructure development, transport management, training, regulations etc.

- **Institutional capacity of national transport institutions** - the institutions should be well resourced with finance, skilled manpower and expertise, technology, infrastructure and sufficient legal support.

- **National Trade facilitation institution** - Each country should have a national trade facilitation agency. The institution /agency should not double up as a regulator. It should have participation of the public, private and even civil society sectors. Mapping of stakeholders should be done for full inclusivity. It is this institution that should steer development of trade facilitation standards, monitor compliance and as well hold respective stakeholders accountable.

- **Strong private sector organizations** - Private sector associations should be established to represent the freight transport industry where they do not already exist. Associations should be sector-based such as freight forwarding and MTOs owing to their varied and sometimes competing interests. The associations should however have a structured way of collaborating and consulting nationally in order to have a strong voice and harmonized agenda for advocacy. The Associations should be well resourced and with strong command of their membership and the industry/sector that they represent. They should have adequate capacity to undertake research, initiate legislative changes and lobby for legislation of such changes and as well as monitor implementation and provide feedback to the governments. They should act as a reference points for MTOs located in other countries when looking for business partners and service providers in the country where an association is domiciled. The associations should have strong and well-equipped secretariats.

5.1.2 Regional and continental

- **RECs and African Union (AU)**

Some of the issues affecting MT go beyond the border of any one country hence rendering national interventions ineffective in some instances. They include cross border customs operations, operation of transit vehicles, licensing and fees and axle-load control. The regional
and continental transport infrastructure issues and access to sea ports for land-locked countries are also critical issues among others.

These issues can best be handled through RECs and the Africa Union Commission (AUC) as they pursue integration. Institutions in this category enable countries to work together to address issues that hinder trade and integration. This results in harmonization and simplification of customs and transit procedures as well as addressing other non-tariff barriers. The development and implementation of the EAC bill on axle load control is a case in point where a REC has brought together countries with different standards to negotiate an agreement of common axle load standards across the EAC partner states. The Treaty that established the East African Community, for instance, specifically recognizes multimodal transport and has dedicated the whole of Article 98; outlining commitments on simplification and harmonization of rules and procedures and other actions to promote MT. This is a big boost to MT as compliance in one country means compliance in the rest of the countries. The AUC has a role similar to that of the RECs but at the continental level.

The mandate of RECs and AUC to deal with issues relating freight transport and especially MT as well as trade facilitation need to be well entrenched in the institutions’ legislative, governance and policy instruments. These institutions must be empowered to hold countries accountable for compliance with agreed regional and continental standards, policies and procedures. Their institutional capacities should therefore be enhanced to correspond to their mandates and functions. The institutions should lead the way in setting regional and continental agenda, planning, developing policies and standards on international transport and trade facilitation. Regional and continental transport infrastructure projects planning should also be dealt with at this level.

The RECs and AUC and therefore African countries should adopt a common agenda and roadmap for developing an African MT industry should ensure synchrony of interventions to avoid unnecessary overlaps and gaps. This should include identification of key priorities including but not limited to legal and regulatory reform especially development and adoption of common rules and regulations on MT. All countries should mainstream the rules into their laws for concurrent implementation and enforcement. The section on legal interventions (table 3) provides an outline of the areas that should be covered in the rules for possible consideration.

A big challenge facing RECs and AUC is their limited ability to make member states implement their commitments. Indeed, even enforcement of the above rules and standards will face similar challenges. To stem this problem, RECs should develop strong time-bound implementation and monitoring mechanisms. These should be steered by technical committees comprised of member states thus holding members accountable for noncompliance.

- **The freight transport industry**
The industry should be organized in business membership associations at REC and continental level. A few regional associations already exist such as the Federation of East African Freight Forwarders Associations (FEAFAA), Federation of Clearing and Forwarding Associations of Southern Africa (FCFASA) etc. These should act as reference points for MTOs located in other countries when looking for business partners and service providers in the country where an association is domiciled. The Associations should be strong with adequate capacity to undertake research, initiate legislative changes and lobby for legislation of such changes. They should be in a position to assess the impact of the various changes and interventions deployed from time to time and provide objective feedback to government. An Africa-wide association on freight transport industry should be established with sufficient representation of all relevant sub-sectors and regions, which should work closely with the AUC. Similar associations should be considered at the REC level. The Continental association should take in lead in the setting of broad framework of standards for the freight forwarding and MT industries in Africa. Such an association could be housed within the AUC headquarters and supported accordingly.

5.2 Legal and Regulatory environment

5.2.1 Intervention on legal environment to support MT

Towards creating a MT-friendly environment, there is need to address the legal challenges that were previously analyzed. This is in recognition that legal regulatory barriers impact heavily on trade facilitation and MT industry.

A. Recognition of multimodal transport

All African countries should undertake the relevant legislative reforms to fully recognize and entrench MT in their transport laws.

B. Legal/regulatory framework for MT

The uniqueness of MT as an international transport service necessitates a legal framework that effectively deals with its peculiarities. Laws of any one particular country where the goods originate, pass or designated for delivery are inadequate to deal with MT issues. First, the contracting parties (MTO and the shipper/consignor) may not be operating from the same legal jurisdiction, second the service is performed through several national legal jurisdictions and third most or even at times all the service providers enlisted by the MTO to provide specific parts of the MT service belong to different legal jurisdictions. This poses a challenge as to which legal jurisdiction would apply say for the contract between the MTO and the consignor and also the contracts between the MTO and his sub-contractors service providers. Even if a country had its own law on MT, it would need to align such to international practice.

Thus Africa requires legal/regulatory framework under which the MT services will be provided. This should aid is dealing with national legal deficiencies, which often stand in the way of MT. The regulatory framework need not depart significantly from similar international regulations/rules since Africa is part of the global freight logistics industry. Some of the existing rules and regulatory frameworks that Africa could borrow from or domesticate include: The
United Nation Convention on International Multimodal Transport of Goods, 1980; the UNCTAD/ICC Rules for Multimodal Transport documents, 1992 and the ASEAN Framework Agreement on Multimodal Transport, 2005 and these are strongly recommended as reference. It should be appreciated that the continent is the smallest player in the global economy and often impacted by the happenings in the global market hence the rules need not depart a lot from what is happening globally. In any case, the rules/regulations should protect the interests of various commercial parties involved. Key actors in MT namely rule-makers (governments including RECs and AU), service providers (MTOs, freight forwarders, carriers etc.) and service users (shippers) should be involved in the making of the regulations. It should be the responsibility of freight forwarders/MTOs and shippers to lobby for suitable regulations. Based on international practice and considering the need to position African MTOs to competitively participate in the global MT industry, the proposed legal framework/rules for MT in Africa should at least cover the following:

Table 3: Coverage of the proposed legal framework/rules for MT in Africa

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<td>1.</td>
<td>Applicability</td>
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<td>2.</td>
<td>Definitions</td>
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<td>3.</td>
<td>Mandatory application</td>
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<td>4.</td>
<td>Regulation and control of MT</td>
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<tr>
<td>5.</td>
<td>Documentation for MT - including issuance, negotiability, content etc.</td>
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<tr>
<td>6.</td>
<td>The Responsibility of the MTO</td>
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<td>7.</td>
<td>The liabilities of the MTO</td>
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<td>8.</td>
<td>Limitation of liability of MTO</td>
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<td>9.</td>
<td>Loss of right of the MTO to limit liability</td>
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<td>10.</td>
<td>Liability of the consignor</td>
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<td>11.</td>
<td>Notification of loss or damage of the goods</td>
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<td>12.</td>
<td>Limitation of liability</td>
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<tr>
<td>13.</td>
<td>Application of the rules to action on tort</td>
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<tr>
<td>14.</td>
<td>Applicability of the rules to multimodal transport operator’s servants, agents and other persons employed by him</td>
</tr>
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<td>15.</td>
<td>Claims and action</td>
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<td>16.</td>
<td>Limitation of actions</td>
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<td>17.</td>
<td>Jurisdiction</td>
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<td>18.</td>
<td>Arbitration</td>
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<td>19.</td>
<td>General average</td>
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<td>20.</td>
<td>Unit of account of monetary unit and conversion</td>
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</table>

C. **Institutional reforms**

There is need for legislative and regulatory reform in order to create overall focal institutions responsible for transport and trade facilitation in countries where they do not exist and empower them. Oversight trade facilitation entities should not play regulatory roles.

D. **Liberalization**
Legal reform may be necessary in some countries to entrench liberalization of key transport services such as port operations. The reforms should also aim at encouraging private sector participation and investment in provision of transport infrastructure and services. The ultimate objective being enhancing the supply and competitiveness of transport services.

In undertaking liberalization, it is important to guard against proliferation of monopolistic tendencies especially in provision of key services such as sea port, rail transport services etc. Where such services are provided by a few, the requisite competition safeguards should be available to insulate MTOs and other transport users. Liberalization should aim at enhancing supply of services and improving efficiency and competitiveness. Through engagement between the key public and private transport sector stakeholders, service level standards should be agreed upon in such areas in order to hold key service providers accountable.

E. Road transport services

The legal and regulatory barriers that impede road transport service providers should be addressed. This should aim at rationalizing, simplifying and harmonizing the requirements within the RECs and as much as possible across Africa thus creating predictability and making compliance easy and competitive. Doing so will scale down the barriers that impede cross border operations.

F. Aligning national relevant laws to international conventions

African countries should align their laws to relevant international conventions on transport. This should facilitate African MTOs to operate on the global platform. It will also prepare African MTOs to do business with the rest of the world. Some of these include MT Convention, Hague Rules, and Hamburg Rules etc.

5.2.2 Interventions on regulatory environment

A. Customs

Customs administrations in Africa must change their operational approach to center more on trade facilitation and promotion of compliance as opposed to control and enforcement. In doing so, Customs should specifically:

- **Publish and simplify operational procedures** - Customs requirements and procedures must be clear, simple to understand and comply with and not subject to change without notice.

- **Full automation** - Customs administrations should invest in automation of business processes and deliberately take action to reduce paper-based transactions and human intervention.

- **Enhance public private sector partnership** - The administrations should engage genuinely with the private sector especially the freight forwarding and MT industry. The engagement should be structured to cultivate sincere partnership based on trust. The partnership should give more credence to setting and implementation of operational standards.

- **Risk management** - Customs control and enforcement should largely be risk-based. This should entail leveraging on technology in identifying, measuring and mitigating the risks.
Deployment of electronic cargo scanning and tracking serve as examples of the available options. Profiling is also an essential element of risk management. Customs control should primarily be based on known and predetermined risk.

- **Enhance customs cooperation** - Customs administrations should cooperate in the discharge of their mandates. This should allow sharing of information and avoid the need to repetitively capture data as cargo transits through several customs territories in the performance of the MT contract. As a result, Customs administrations should get advance information on the expected cargo and process it through their territories even before its arrival. Customs cooperation could provide an avenue for expediting processing of cargo across green borders. The one stop-border post initiative, for instance, enables Customs administrations of neighboring countries to work together to either undertake joint cargo clearance procedures or designate procedures to be undertaken by either administration on behalf of both thus cutting down on time it takes and the procedures involved. This should assist in avoiding customs-related delays on cargo and duplication of processes.

- **Authorized Economic operators** - Customs administration should actualize the Authorized Economic Operator (AEO) in Africa. The programme should include the tangible benefits and privileges that the AEO accredited freight forwarders, customs agents, MTOs, transporters among others are entitled to. Moreover, the requirements and process of becoming and ceasing to be an AEO - accredited operator must be simple, clear and objective. Most important, the AEO operators must be accorded the package of benefits that they are entitled to. In addition, customs administration must provide for mutual recognition of AEO accredited operators across different Customs territories.

- **Regionalize and harmonize customs operations** - Taking advantage of the ongoing regional integration in Africa, customs laws and procedures should be harmonized. Regional economic blocs such as COMESA, EAC, SADC, and ECOWAS among others already provide ready platform for this. In EAC, Customs operations are governed by the same laws and regulations across the partner states. The region has now reached the Single Customs Territory (SCT) stage that allows for destination clearance of goods meaning a single customs declaration. COMESA, SADC and EAC are working to implement a tripartite free trade area (FTA) and this is an exceptional opportunity for Customs administrations in the FTA to harmonize their operations. This should be extended to be Africa-wide in order to ease cargo clearance through Customs across Africa and as a result boost MT.

- **Adoption of regional and international customs risk-based securities** - Africa Customs administrations should consider regional and international Customs securities as opposed to relying on national securities that are restricted to national territories.
  - **Regional Customs securities** - The COMESA Regional Customs Transit Guarantee (RCTG) is one such. It enables goods under Customs control to move through several Customs territories without the need to provide fresh security in each country.
Transit Routier Inter État (TRIE) - Western Africa is using TRIE, which is based on the Customs Convention on the International Transport of goods under the cover of TIR carnet (TIR). While the success of The TRIE has been limited the barriers in the operating environment, it provides opportunity for deploying a security that modelled on international practice. African countries may also wish to consider ratifying and implementing the TIR convention with a view to instituting an international door-to-door customs security.

Use of risk-based securities - Customs administrations should in principal base the amount and type of security requisite on the risk assessed/inherent on the goods under control. The system for risk assessment should be made simple, clear and objective making it friendly for the MTOs and their sub-contractors

- Establishment and adherence to service level standards - Customs administrations should establish, publicize and adhere to service level standards. This enhances predictability and favours MT operations.

- Implementation of international transit agreement - Customs administrations should expedite implementation of transit agreements and international transit conventions

B. Other regulatory agencies (ORAs)

Like Customs administrations, other regulatory agencies should contribute towards trade facilitation. In this regard, the following is recommended:

- Rationalization of the various roles and interventions to avoid overlap - Governments need to rationalize the roles and operations of the various regulatory agencies involved in cargo to avoid unnecessary overlaps.

- Simplification of business processes - regulatory agencies should be involved more in trade facilitation initiatives. Their business processes should be automated as much as feasible and simplified.

- Cooperation with Customs administrations - ORAs should cooperate more with Customs administrations and work in concert. In so doing, the agencies should complement each other and avoid role overlap. Where possible, non-core actors could designate counterpart agencies to take over their mandates at borders and ports.

- Coordination - regulatory agencies should be coordinated to ensure optimal service delivery and avoid unnecessary delays and inefficiencies. The coordination role should be played by a national oversight trade facilitation agency that does not execute any regulatory role. Such agencies exist in some countries in Africa and other parts of the world.

- Service level commitment - regulatory agencies should commit to service standards and be held to account for such commitments. The national oversight trade facilitation agencies should monitor adherence to the service standards.
5.3 Banking & insurance

To address the banking, insurance and financial barriers analyzed under sub-section 4.2.1 (c) of this paper, the following recommendations should be considered.

5.3.1 Banking

African banks should support development of an African multimodal transport industry. Banks should provide cross border services and expand their electronic payment services. This is critical as service providers will often be situated in countries different from those where MTOs are residents. Foreign exchange control regimes, where they exist and inhibit international trade, should be relaxed. Legal and regulatory barriers to cross border operations should be addressed mainly through RECs and AUC.

5.3.2 Insurance services

Robust and reliable insurance services are required to support multimodal transport. The insurance industry in Africa should ensure availability of competitive insurance services to meet the growing needs of the transport industry and make the service easily accessible. These include among other marine insurance cover, carrier’s liability, customs bonds, and container guarantees etc. Insurance companies should consider offering services beyond their borders in order to adequately serve the MT industry. Transport liability regimes should be aligned to insurance practices. Legal and regulatory barriers to cross border operations should be addressed mainly through RECs and AUC.

5.3.3 Credit referencing

African countries need to develop reliable national credit reference systems and cooperate in information sharing. As more freight forwarders provide MT services and enlist services of service providers from other countries, who may not be well known to them, credit referencing could provide useful information on the reputation of various contracting parties in MT services.

5.4 Overcoming restrictive trade practices within the industry

International shipping lines operating in Africa need to change their perception of the continent’s market and offer trading terms and conditions that encourage freight forwarders to offer MT services. In propagating good business practices, the following is recommended:

- Shipping lines should accept alternative securities for their containers released to the MTOs such as insurance guarantees in place of cash deposits and bank guarantees. This should be done without undermining the commercial interests of shipping lines. Determination of suitable securities and the quantity should correspond to the risk assessed on individual clients. The freight forwarding/MT associations should engage with the shipping lines and lobby governments support to acceptance of such securities and develop an acceptable continental risk framework. This is already happening in East Africa. Associations should also promote ethical conduct and adherence to industry standards by their members in order to win the trust of shipping lines.
• Shipping lines should avoid imposing unjustified, uncompetitive and restrictive terms and conditions to the African market. Consultation with freight forwarders and MT industry’s associations should provide a suitable avenue for addressing such issues for mutual understanding on terms and conditions.

• Legislative safeguards should be considered to insulate African MTOs/freight forwarders and shippers from being exploited by international shipping lines with a view to promoting healthy competition and leveling the transport logistics playing field. However, as much as possible, effort should be made to generate industry-based service standards, terms and conditions that are anchored in the law in order to avoid over regulation and thus undermine free trade.

5.5 Appropriate choice of commercial terms

Sensitization and capacity building of African shippers on INCOTERMS is required. This should empower them to choose the right INCOTERMS; those terms that assign full responsibility of performing the entire transport service from origin to destination on either party between the buyer and the seller. Such INCOTERMS allow the shippers the opportunity to enlist MT services, who assumes full responsibility of moving the goods from door to door. African shippers should be encouraged to use this category of INCOTERMS (EX-w, CPT, CIP, DAP, DAT and DDP).

5.6 Human resource development

MTOs provide predetermined quality of services across several countries. For an African MT industry, this presupposes sufficient supply of skilled manpower and expertise across the continent. Considering that many parts of Africa lack demand-driven training interventions on freight forwarding, it is imperative that training standards for freight forwarders are developed. Several public, private sector institutions as well as some industry associations are already offering some form of industry-related courses. Ghana freight forwarders association is one such association and is offering training in collaboration with International Freight Forwarders Associations (FIATA). In East Africa, Federation of East African Freight Forwarders Associations (FEAFA) has brought together respective national industry’s associations from Burundi, Kenya, Rwanda, Tanzania and Uganda to develop a practitioners’ regional training programme. The six-month course, East Africa Customs Freight Forwarding Practicing Certificate programme (EACFFPC) was rolled out in 2007 and to date over 5000 practitioners have been trained and certified while training continues in all the five countries. The programme has attracted even students from the public sector. The following specific recommendations are proposed on training:

• Carry out training needs assessment targeting both the public and private sector actors in the freight transport and MT industry.

• Develop minimum training standards on MT and transport logistics in general. Benchmarking with international best practice should be done. For instance, FIATA has made significant strides in the training front and it could provide a strong reference.
• Establish continental institute on transport as a center of excellence for training and research on freight transport. Similar institutes should be established at RECs’ and national level. Possibility of seeking strategic partnership with suitable existing training institutions could be explored as an alternative to coming up with fresh establishments. In countries where government and or private sector have already done some work towards this end, this could form foundation pillars. Close collaboration between governments and private sector is critical.

5.7 Technology

MT industry is heavily dependent on modern technology especially in communication. Information exchange is high and often required in real time. To ensure technology is positioned to fully support African MT industry, the following interventions are proposed:

i. Undertake legal and regulatory reforms to fully entrench e-commerce in all African countries.

ii. Increase investment in modern transport and communication technology infrastructure

iii. Invest in transfer of technology

iv. Encourage use of information technology and electronic data exchange especially in conducting business with the public sector.

v. Increase the use of technology in risk management

vi. Set up the necessary policy safeguards to secure the integrity of cross-border and international payment systems.

vii. Create a digital map and online market place for the MT and other transport service providers at national level.

5.8 Infrastructure

The continent must enhance the supply of quality infrastructure to stimulate a vibrant MT industry. This will require establishment of minimum standards to guide countries on the quality of infrastructure to develop. Since resources are limited to meet the very huge and rising demand of transport infrastructure, the continent will have to designate and prioritize key corridors that opens and interconnects Africa. The low connectivity of the various modes must also be addressed. Regional infrastructure projects could be undertaken as a way of optimizing resources and the expected utilization and therefore increase return on investment. Countries sharing regional inland water masses could work together to develop the requisite infrastructure to open up the inland waterways. Governments may wish to provide special incentives to attract private investors to develop transport infrastructure in areas that governments are constrained by resources. Legal and regulatory reforms will also be required in keeping with the countries’ and continent’s vision on infrastructure.
6 Spurring establishment of national private sector MTOs

The foregoing has considered the present external operating environment for the MT industry in Africa, analyzed the challenges that confront the industry and recommended various interventions to encourage development of an African MT industry. There are however industry-based interventions/measures that are necessary if development of African MT industry is to be actualized. These recommendations are expounded below.

6.1 Information sharing

The associations should be a source of information for the MT industry in their country. Such information should be available and accessible online and updated. By collaborating with other associations, industry associations should agree on the minimum information to be availed online. Some associations are already providing some of this information but majority are either providing little or none at all.

6.2 Training and professionalism

Professionalism is critical to development of the African MT industry. Professionalism requires use of expertise/skilled manpower coupled with ethical conduct in the discharge of services.

6.2.1 Training

Industry associations should steer training intervention for the MT industry and the transport industry in general.

i. They should take lead in identifying training needs, developing suitable training interventions and setting up quality control systems. This should include continuous professional development programmes to deal with emerging issues such as supply chain safety and security, sustainable freight transport etc.

ii. They should cause development of minimum training standards that will act as benchmarks for developing and deploying training interventions with a view to ensuring harmony of skills across the regions and the continent.

iii. Associations should raise awareness of freight forwarders and shippers on MT.

iv. Special capacity building programmes should be developed to assist African freight forwarders to develop the requisite capacity to provide MT services. A simple handbook/guide on how to establish and offer MT services should be considered for development.

6.2.2 Professional Conduct and management

A. Registration and self-regulation

The freight forwarding and MT industries should consider professional registration of practitioners based on their areas of qualification, expertise and specialization. Self-regulation should also be considered with a view to providing an effective peer mechanism for upholding
professional ethics and integrity. This will improve the overall image and reputation of the industry, which are essential for business partnership and collaboration and are key considerations for the MT industry. In East Africa, FEFFAA has initiated an online registration system of trained and certified practitioners and development of a model self-regulation legislative bill is in progress. The bill will be used to enact self-regulation laws for Customs agents and freight forwarders at country level.

B. Model code of conduct

MTO operators rely on third party logistics service providers to execute their MT contracts. Professional conduct is important among the various service providers in order to win the trust of such service providers in and outside of Africa. There is therefore need to develop model code of conduct to be adopted and implemented across the continent with national associations overseeing enforcement nationally. The code of conduct could purpose:

✓ To uphold a high standard of business ethics and professional conduct among Freight forwarders, MTOs and related service providers and other stakeholders.
✓ To ensure a high level of professional education and experience essential to provision of efficient services.
✓ To encourage operation of financially sound, stable and accountable freight Forwarders and MTOs.
✓ To combat corruption, transport logistics related safety and security threat, freight logistics fraud, illicit trade and trafficking of goods and persons.
✓ To provide a framework through which national associations can monitor and enforce integrity and professionalism in their various jurisdictions.
✓ To promote healthy competition among operators in the industry.
✓ Provide the basis for regulating behavior and framework for dealing with errant operators and resolution of disputes.
✓ To protect and promote the reputation and good public image of the freight forwarding and MT industries.
The code should among other things cover the following:

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<td>Interpretation</td>
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<td>Objective and purpose of the code</td>
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<td>3.</td>
<td>Scope of the code</td>
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<td>4.</td>
<td>Applicability</td>
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<td>5.</td>
<td>Professional qualification</td>
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<td>6.</td>
<td>Financial and resource standing</td>
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<td>7.</td>
<td>Code of professional conduct</td>
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<td>8.</td>
<td>Procedures for handling complaints</td>
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<td>9.</td>
<td>Procedures for enforcing the code</td>
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<td>10.</td>
<td>Disciplinary action</td>
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<td>11.</td>
<td>Harmonization and compliance</td>
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<td>12.</td>
<td>Compliance undertaking</td>
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Table 4: The main areas to be covered in the code of conduct

C. **Model Standard trading terms conditions**

Most African freight forwarders, especially the small and medium sized firms do not insulate their contractual relations with standard trading conditions. This exposes both the freight forwarders and their client to unnecessary commercial hazards.

It is therefore recommended to develop model standard conditions, which can be adopted and used by firms or domesticated. Africa MTOs that contract on the basis of such terms secure themselves and their customers and enhance their reputation and are more attractive for MT contracts. The model standard trading conditions should include the following among others:
### Table 5: Outline of the Standard Trading Terms conditions

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<th>1.</th>
<th>Preamble</th>
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<td>2.</td>
<td>Objectives</td>
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<td>3.</td>
<td>Interpretation</td>
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<td>4.</td>
<td>Owner's risk</td>
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<td>5.</td>
<td>Scope of application of trading terms and conditions</td>
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<td>6.</td>
<td>The company as a principal or an agent</td>
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<td>7.</td>
<td>Sub-contracting</td>
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<td>8.</td>
<td>Company's discretion in the absence of instructions</td>
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<td>9.</td>
<td>Company's general discretion</td>
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<td>10.</td>
<td>Company's obligations in the absence of instructions</td>
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<td>11.</td>
<td>Customer's general responsibilities</td>
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<td>12.</td>
<td>Customer's responsibilities for packaged and containerized goods</td>
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<td>13.</td>
<td>Customer’s instructions</td>
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<td>14.</td>
<td>Insurance</td>
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<td>15.</td>
<td>Goods requiring special arrangements</td>
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<td>16.</td>
<td>Goods requiring prior consent of the company</td>
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<td>17.</td>
<td>Perishable goods</td>
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<td>18.</td>
<td>Acceptance of delivery</td>
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<td>19.</td>
<td>Collection of expenses</td>
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<td>20.</td>
<td>Examination of landed goods</td>
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<td>21.</td>
<td>Duties, taxes, impost, levies and deposits</td>
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<td>22.</td>
<td>Charges</td>
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<td>23.</td>
<td>Lien</td>
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<td>24.</td>
<td>Indemnity by the customer</td>
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<td>25.</td>
<td>Limitations of the company’s liability</td>
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<td>26.</td>
<td>Breach</td>
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<td>27.</td>
<td>Arbitration</td>
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<td>28.</td>
<td>Variation of the terms and conditions</td>
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**D. Dispute resolution**

A mechanism for dispute resolution should be established. Industry associations should provide the primary focal point for MT dispute resolutions. This should boost the role of the associations as the custodians of industry professionalism in their countries. The mechanism should be seen to take care of interests of both the local MTO and freight forwarders and other service providers who are enlisted by MTO to provide various services.

**6.3 Partnership and joint ventures**

Most of the freight forwarders in Africa are not strong and well networked and hence need to partner with counterpart freight forwarders and other service providers for them to execute MT contracts. To position themselves to undertake MT operations, African freight forwarders should do the following:

i. Form partnership and joint ventures with their counterparts in Africa and other parts of the world.
ii. Appoint representatives in countries and regions where they do not have presence.

iii. Joining global freight forwarding networks. African freight forwarders could also form their own networks through their associations. This will expand their market and afford them the chain of partners required to execute MT contacts successfully.

iv. Establish strategic alliances with established international MTOs. The intention being to ride on the latter’s capacity, competitiveness, network and international reputation to market themselves. Such alliances are effective vehicles for technology and know-how transfer as well as training.

v. Small and medium sized African firms could also consider mergers and joint ventures in order to optimize on their resources and as well leverage on resources of their partners thus boosting their capacity for undertaking MT contracts.

vi. Join international industry associations like FIATA, IATA etc., which provide unique opportunity for networking and learning.

6.4 Adoption of internationally recognized multimodal transport documents

National associations should, on behalf of their members, approach FIATA to be allowed to issue MT transport documents in their countries. This will afford MTOs the opportunity to access such documents and use in their business. MT documents should already be covered in the proposed rules/regulations on Africa-wide MT.

6.5 Certification and accreditation

ISO certification as well as other internationally recognized certifications attest to the firm’s competitiveness and capability to provide services to meet set standards. Africa MTOs and freight forwarders should be encouraged to seek relevant certifications. Certification could be linked to the AEO accreditation and compliance with supply chain safety and security standards. Most international reputable firms are increasingly demanding ISO certification and AEO accreditation from their logistics services providers. It will be beneficial of African MTOs to require their sub-contractors to apply the same quality standards.

6.6 Industry data and research

Industry associations should invest in research and data preservations in order to have solid and objective basis against which to agitate for preferred changes to improve MT’s industry environment.

7 Conclusion

Africa must take deliberate steps to embrace and develop the MT Industry. Concerted efforts of both the private and public sectors are critical at national, REC’s and continental levels. The starting point should be anchorage of MT in transport laws and putting in place the necessary legal and regulatory pillars to support it and as well removing related barriers. This should also include development of
clear policies and long-term plans on MT. To drive the MT agenda, strong and effective institutions should be developed including organization of the freight logistics sector. Human capacity development for the relevant public institutions and the freight forwarding/MT industries should also be undertaken. There should be awareness creation on MT services for the benefit of freight forwarders and the shippers. It is important to approach MT as an international service and therefore ensure consistency with international practices. The freight logistics sector should continually lobby and partner with the public sector to develop the MT industry.
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ASEAN Framework Agreement on Multimodal Transport, 2005
Multimodal Transport Handbook for officials and practitioners, UNCTAD -1996

9 Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AEO</td>
<td>Authorized Economic Operator COMESA</td>
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<td>AU</td>
<td>Africa Union</td>
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<td>AUC</td>
<td>African Union Commission</td>
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<tr>
<td>COMESA</td>
<td>Common Market for East and Southern Africa</td>
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<td>EAC</td>
<td>East African Community</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
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<td>FCFASA</td>
<td>Federation of Clearing and Forwarding Associations of Southern Africa</td>
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<td>FTA</td>
<td>Free Trade Area</td>
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<td>IRU</td>
<td>International Road Transport Union</td>
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<td>ITS</td>
<td>Intelligent transportation systems</td>
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<td>MT</td>
<td>Multimodal Transport</td>
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<td>MTO</td>
<td>Multimodal Transport Operator</td>
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<td>NTBs</td>
<td>Non-tariff barriers</td>
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<tr>
<td>NVO MTOs</td>
<td>Non vessel Operating Multimodal Transport Operators</td>
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<td>ORAs</td>
<td>Other regulatory agencies</td>
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<tr>
<td>RCTG</td>
<td>Regional Customs Transit Guarantee</td>
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<td>RECs</td>
<td>Regional Economic Communities</td>
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<tr>
<td>RKC</td>
<td>Revised Kyoto Convention</td>
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<td>SADC</td>
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<tr>
<td>SCT</td>
<td>Single Customs Territory</td>
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<tr>
<td>TIR</td>
<td>The Convention on International Transport of Goods Under Cover of TIR Carnets</td>
</tr>
<tr>
<td>TRIE</td>
<td>Transit Routier Inter État</td>
</tr>
<tr>
<td>WCO</td>
<td>World Customs Organization</td>
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<tr>
<td>WTO</td>
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