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Swaziland

**Programme for Infrastructure Development in Africa (PIDA): Addressing
the infrastructure gap in Africa, to speed up regional integration**

DEPARTMENT OF INFRASTRUCTURE AND ENERGY

A. CONTEXT

I. Infrastructure to support regional integration sustainable socio-economic development

1. The process of the continent economic integration gained traction with the 1991 Abuja Treaty that established the African Economic Community (AEC) to be achieved by 2028. The objectives of the AEC are among others:
 - To promote economic, social and cultural development and the integration of African economies in order to increase economic self-reliance and promote an endogenous and self-sustained development;
 - To establish, on a continental scale, a framework for the development, mobilization and utilization of the human and material resources of Africa in order to achieve a self-reliant development;
2. The article 28 of the treaty proposes the creation of the Regional Economic Communities (RECs) as the building blocks of African integration. An important benefit of regional infrastructure is its contribution to swell trade within Africa and between Africa and the rest of the world. In addition, the wideness of the African continent with its 30 million km² requires also good infrastructure to ensure free movement of people and goods.
3. Infrastructure makes possible the formation of large and competitive markets in place of the present collection of small, isolated and inefficient ones and to lower costs across production sectors. Shared regional infrastructure is a key solution to problems of small scale and adverse location. Infrastructure is therefore a key enabler to ensure regional integration in order to build large scale of trade, boost and sustain growth. Ended despite robust GDP gains by many countries in recent years, Africa's staggering infrastructure inefficiencies have been choking integration efforts. .

II. Africa's Infrastructure status: Large deficit

4. Several studies among others the Programme for Infrastructure Development in Africa (PIDA) and African Infrastructure Country Diagnostic (AICD) studies showed that compared to other continents in terms of measure of infrastructure coverage, such as road density, telephone density, power generation capacity or service coverage, African countries are lagging behind. The road access rate in Africa is only 34%, compared with 50% in other parts of the developing world, while transport costs are 100% higher. Only 30% of Africa's population has access to electricity, compared to 70-90% in other parts of the developing world. Water resources are underused with only 5% of agriculture under irrigation. The Internet penetration rate is a mere 6% (2012), compared to an average of 40% elsewhere in the developing world. Deficient infrastructure in today's Africa has been found to sap growth by as much as 2% a year.

B. CLOSING INFRASTRUCTURE GAP

I. The Programme for Infrastructure Development in Africa (PIDA), a multi sector and multi stakeholders initiative to close the infrastructure gap

5. Closing infrastructure gap is a continental problem that requires a continental solution. The Programme for Infrastructure Development in Africa (PIDA), a programme dedicated to facilitating continental integration in Africa through improved regional infrastructure networks is that solution.
6. The Programme for Infrastructure Development in Africa (PIDA) is an African Union Commission initiative, in partnership with the Regional Economic Communities, the United Nations Economic Commission for Africa, the African Development Bank and the NEPAD Planning and Coordinating Agency.
7. Indeed 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. Implementing PIDA will create jobs, transform the way business is done, reduce the cost of doing business and enhance Africa's competitiveness within itself and in the global economy as well as act as a catalyst to Africa's economic transformation, diversification through industrialization value addition and sustainable and inclusive growth. It will help deliver a well-connected and prosperous continent and enable African stakeholders to speak with one voice for continental and regional infrastructure development based on a common vision of regional integration and long term agenda.
8. PIDA's overall strategic objective aims at accelerating the regional integration of the continent, supporting the objectives and facilitating the creation of African Economic Community as planned by the African Union's Abuja Treaty.
9. By improving access to integrated regional and continental infrastructure networks, at national level, PIDA will allow countries to meet forecast demand for infrastructure services and boost their competitiveness by: (i) increasing efficiencies; (ii) accelerating growth; (iii) facilitating integration in the world economy; (iv) improving living standards; (v) unleashing intra-African trade.

II. Development and prioritization of PIDA Projects and Programmes

2.1 Economic and Infrastructure OUTLOOK

a) The context

10. Africa has about 20% of the world's land mass and 16% of its population, but only 2.5% of its gross domestic product (GDP). The continent's socio-economic situation can be summarized as follows (UNDP 2011): (i) Africa is endowed with rich

resources. Africa has minerals, oil, and a resilient labour force; (ii) despite these resources yet Africa faces multiple challenges and is highly fragmented, with a large number of landlocked countries; (iii) Africa is home to over two-thirds of the world's least developed countries, 12 twelve of which have no access to the sea , (iv) Africa is ranked the lowest of all continents on the UNDP's Human Development Index (UNDP 2010), (v) of the 50 fifty African countries for which the HDI is computed, 35 thirty five are in the low human development group and only 4 are in the high human development group.

b) Drivers of Africa's recent and future growth

11. Historically, a key driver of Africa's growth has been its richness in natural resources. Africa's population is the other major driver of growth. The continent's population is projected to increase from 1 billion in 2010 to 1,524 in 2030 and to about 1.8 billion in 2040 much faster rate than for other continents—and to pass those of China in 2025 and India in 2030.
12. Urbanization will increase from 40% in 2010 to 56% in 2040. In 2010 Africa had 51 cities with more than a million inhabitants, and one city (Cairo) with more than 10 million. By 2040 it is expected to have more than 100 cities of more than one million inhabitants and 7 cities of more than 10 million. The largest city is projected to be Kinshasa, where the population is expected to reach 24 million.
13. The future growth will be driven by a surging population, increasing levels of technology absorption and education

c) GDP growth prospects to 2040 and infrastructure demand

14. PIDA estimates that the **average growth** rate for 53 African countries (GDP-weighted and expressed in U.S. dollars PPP) **will be 6.2% per year between 2010 and 2040**. This Growth will require new infrastructure to meet the following projections of the demand:
 - Power demand will increase at an average annual growth rate of nearly **6%** from 590 terawatt hours (TWh) in 2010, to more than 3,100TWh in 2040.
 - Transport volumes will increase 6–8 times, with a particularly strong increase of up to 14 times for some landlocked countries. Port throughput will rise from 265 million tons in 2009, to more than 2 billion tons in 2040.
 - Water needs will push some river basins—including the Nile, Niger, Orange and Volta basins—to the ecological brink.
 - Information and communications technology (ICT) demand will swell by a factor of 20 before 2020 as Africa catches up with broadband. Demand, around 300 gigabits per second in 2009, will reach 6,000 gigabits per second by 2018

2.2 PIDA planned to meet the Infrastructure Demand

a) Strategic framework

15. The increased demand highlighted above will require adequate regional infrastructure that PIDA proposes to meet. Thus Overall, Africa’s infrastructure upgrading and modernization needs are expected to cost US\$360 billion up to the year 2040 **(2020 for ICT) and will deliver:**

Indicators	PIDA up to 2040 (Year 2020 for ICT)
Modern highways	37 300 KM
Modern railways	30 200 KM
Port Added ton capacity	1,3 billion tons
Hydroelectric power generation	61 099 MW
Interconnecting power lines	16 500 KM
New water storage capacity	20 101 hm3
ICT International Broadband Capacity	6 Terabits

16. Expected impacts

In addition, **the following is what Africa will look like by 2040** if all countries and leaders embrace the shared responsibility of PIDA implementation:

- Up to 15 million new jobs will be created for the construction, operation and maintenance of the new infrastructure systems and services to be put in place ;
- PIDA projects will generate many more millions of jobs indirectly;
- Power access will rise from 39% (2009) to nearly 70% in 2040, providing access to an additional 800million people;
- Africa’s competitiveness will be established in niche markets and in a growing spectrum of mainstream activities, including agriculture and value-added manufacturing ;
- Africa’s share of world trade will be much higher, at least twice today’s share of 2% and intra-African trade shares will double from the current levels of 11-12%

Specifically, PIDA will enable countries to: (i) reduce energy costs and increase access. Africa will reap savings on electricity production costs of \$30 billion a year. (ii) Slash transport costs and boost intra-African trade. Transport efficiency gains will be at least \$172 billion in the African Regional Transport Integration Network (ARTIN), (iii) Ensure water and food security. (iv) Increase connectivity by boosting broadband connectivity by 20 percentage points. Increasing broadband penetration by 10%, which can be expected by 2018, will increase GDP by 1% by strengthening connections between goods and markets and between people and jobs.

PIDA –Ambitious, but affordable!: Less than 0,2% of 2011 African combined and esteemed GDP, or 1% of national budgets and 5% of Investment budgets

b) Vision and Strategies per sector

17. Transport:

- Vision: work toward an integrated continent where the transport infrastructure and services enable the free movement of goods and people
- Strategies: (i) Improve the connectedness of African capitals and major centers with modern paved roads; (ii) Satisfy demand at the least economic cost, with priority for landlocked countries, while minimizing the environmental impact; (iii) Develop modern ARTIN corridors and air transport services to bring the performance up to best world practice in efficiency, cost, reliability, and safety;

18. Energy:

- Vision: develop efficient, reliable, cost-effective, and environmentally friendly infrastructure; and, enhance access to modern energy services
- Strategies: (i) Develop major regional and continental hydroelectric projects; (ii) Implement high-capacity oil refineries and oil and gas pipeline projects; (iii) develop renewable energy resources;

19. Transboundary Water (TWR):

- **Vision:** develop projects, strengthen resource management frameworks, and ensure water supply security for socioeconomic development
- **Strategies:** (i) Strengthen institutions for efficient cooperation on shared water resources; (ii) Develop transboundary water infrastructure to meet increasing water demands while protecting people and the environment; (iii) Improve knowledge on transboundary water basins and shared aquifer;

20. ICT:

- Vision: enable an information society and integrated digital economy in which all actors have access to reliable and affordable ICT network and services
- Strategies: (i) Build the support and ensure the environment to transform Africa into an e-society; (ii) Satisfy African broadband demand – at least cost; (iii) Increase accessibility and security of access for all country to landing point sub marine cables; (iv) Provide appropriate and accessible services to develop social and regional integration;

21. Implementing the strategies identified for each sector will lead to target maps attached in **Annex1**

2.3 The PIDA Priority Action Plan (PIDA-PAP)

22. The PIDA Priority Action Plan (PIDA-PAP) is composed with provides 51 actionable projects and programmes that promote sound regional integration between 2012 and 2020. The PAP highlights the need to focus on 51 projects and programmes (24 in transport, 15 in energy, 9 in trans-boundary water and 3 in ICT) representing the first batch of agreed priorities resulting from analysis, criteria review, correlations with REC Master Plans and extensive multi stakeholders consultations. These projects and programmes presented in the **Annex 2** are aiming at bridging the infrastructure gap, boosting intra-African trade and enhancing regional integration.

2.4 The PIDA costs

23. While it's difficult to accurately project the capital cost of PIDA's long-term implementation through 2040 (currently estimated at more than \$360 billion), the overall capital cost of delivering the PAP from 2012 through 2020 is expected to be nearly \$68 billion or about \$7.5 billion annually for the nine years.

Region	Cost (US\$ billion)
Continental	3.0
North Africa	1.3
West Africa	6.2
Central Africa	21.5
Southern Africa	12.6
East Africa	23.3
TOTAL	67.9

Total cost of PIDA's PAP by Region

Sector	Cost (US\$ billion)
Transport	24.4
Energy	40.3
Water	1.7
ICT	0.5
TOTAL	67.9

Total cost of PIDA's PAP by Sector

III. PIDA Implementation

3.1 PIDA adoption

24. PIDA was approved by the AU Assembly (**Assembly/AU/Decl.2 (XVIII)**) during the eighteenth ordinary session held in Addis Ababa, Ethiopia, 29-30 January 2012. During the same session, The Assembly resolved to: (i) Include in national priorities, the various projects and programmes contained in the Priority Action Plan (PAP) of PIDA and ensure that sufficient resources are committed to the preparation and implementation of these projects; (ii) Undertake institutional reforms, both legal and regulatory, conducive to the creation of a favorable business climate for private investment in infrastructure; (iii) Promote innovative financing mechanisms reflecting a real commitment by Africa to speed up infrastructure development on the continent.

3.2 PIDA Implementation Challenges

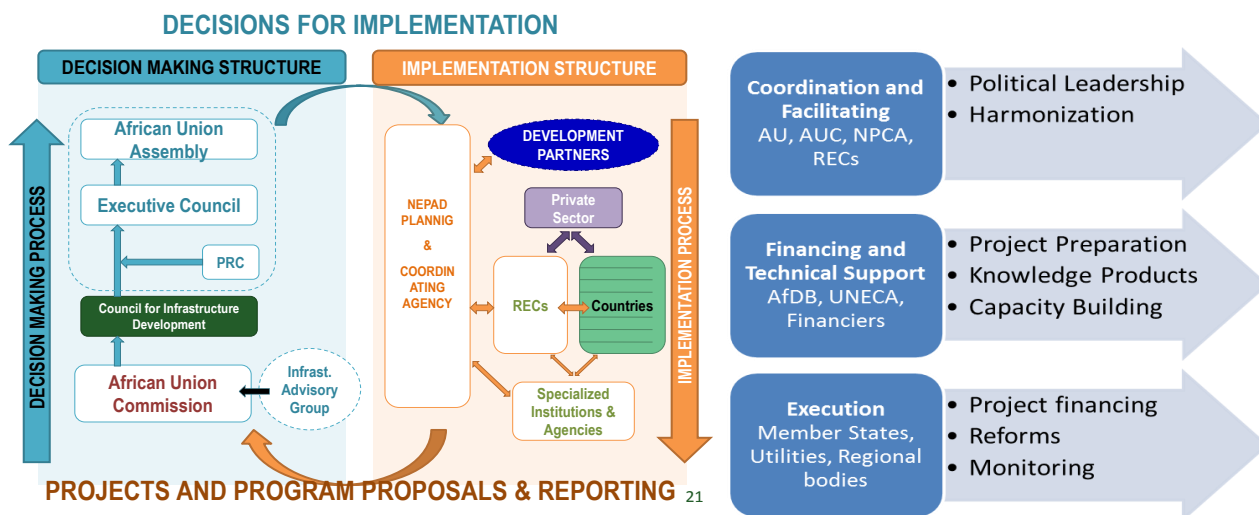
25. The main challenge on infrastructure development in general is the pitfalls encountered in implementing regional infrastructure policies to date, as well as by the mixed experience of infrastructure and regional projects under preparation and implementation.

26. The second group of challenge is related to the project preparation funding which truly marks the interest of African political Authorities to put this programme at a priority level. If projects are not prepared to a bankable stage, mobilizing partners will be seriously hampered. Obviously, Heads of State and Government of the African Union, upon adoption of PIDA, clearly emphasized this aspect of strengthening the existing facility for NEPAD infrastructure projects preparation, housed within the African Development Bank.

27. The third group of challenge is related to difficulties in the physical implementation of regional projects namely the lack of appropriate coordination and alignment with national and regional priorities and appropriated financial mobilization.

3.3 PIDA Implementation Strategy

28. Drawing lessons from regional projects implementation in the past years and taking into consideration the main implementation challenges highlighted above, the AUC in consultation with key stakeholders designed an Institutional Architecture for Infrastructure Development in Africa (IAIDA) to serve as a strategic institutional framework to support the implementation of PIDA. The IAIDA general aim is to reinforce institutional capacities and to create conducive environment for resource mobilization. As presented in the following diagramme, IAIDA comprises the decision making and implementation mechanisms and assigns roles and responsibilities to ensure speedy and efficient implementation of PIDA. Its decision-making component involves several existing actors or bodies with a new innovation in the form of a Council for Infrastructure Development (CID), a non-permanent body, consisting of members of the bureau of the Specialized Technical Committees of the four sectors and the CEOs of RECs.



3.4 Status of PIDA PAP Implementation as of 30 June 2014

29. PIDA PAP Implementation status is characterized by the following implemented or ongoing activities:

- PIDA PAP implementation Road Map 2012-2013 and 2014-2015 was elaborated and jointly planned by the PIDA stakeholders for implementation focusing on priorities to accelerated PIDA PAP delivery;
- Operationalization of IAIDA the PIDA implementation Governance notably by setting up and organizing the meetings of the Steering Committee and the Council For Infrastructure Development (CID) and Infrastructure Advisory Group (IAG) its two new components.
- Development of Capacity Building programme for RECs, NPCA and AUC focusing on PIDA PAP Implementation. On January 2014, a financing agreement was signed between AUC and AfDB and AUC with GIZ to support a 3 years capacity programme;
- Resource mobilization: (i) Development of strategy on the contribution of Member States to the NEPAD- IPPF notably for project preparation, (ii) organization of Dakar Financing conference to mobilize and engage private sector on 16 priority projects implementation ;
- Engaging Private sector in PIDA implementation: Collaboration with the World Economic Forum (WEF) to get the private sector involved in the financing of PIDA PAP projects, notably through a Business Working Group (BWG)
- Coordinating efforts in PIDA-PAP implementation: The AUC, the Chief Executives of the RECs and the CEO of the NEPAD Agency held a Retreat from 28-29 March 2013 in Durban, South Africa, at the margins of the BRICS Africa Summit, with a view to strengthening coordination and implementation of strategic priorities of the continent including PIDA.
- In addition, Infrastructure Forums were held for a number of RECs to align PIDA to their infrastructure plans and to foster enhanced collaboration and synergies. Other meetings held are: (i) Regional consultation meeting to support promotion of PIDA flagship projects in West Africa, Tunis, Tunisia, 4th - 7th Feb, 2013, (ii) AfDB, AUC & NPCA consultative meeting on accelerating the delivery of PIDA PAP- Tunis, Tunisia, 7th Feb. 2013;(iii) Presidential Infrastructure Champion Initiative (PICl) Technical workshop 9th- 10th January 2013, Abuja, NIGERIA.
- Organization of meetings, roadshows and consultations to present PIDA to partners;
- Advocating and raising awareness around PIDA in international forums: (i) Presentation of PIDA to the Fourth Steering Committee Meeting of the Africa-EU Infrastructure Partnership, (ii) Presentation of PIDA in Rio, Brazil, during the BNDES anniversary held under the theme "Investing in Africa: opportunities, challenges and instruments for economic cooperation", (iii) Presentation of PIDA to AUC Partners Group 29th May

2012, presentation of PIDA to bilateral cooperation: China, South Korea, Japan, India, etc.

- Development and implementation of PIDA communication action plan, including a virtual portal VPic ;
- Development of fiches/project profile on each PIDA PAP projects and programmes for inputs to PIDA advocacy, projects bankable documents and communication activities. To that end the 51 projects and programmes are decomposed in to 443 elementary projects fiches. A total of 83 elementary projects have been selected as priority projects to be implemented and 16 of them presented as following has been submitted as first priority to private sector for implementation at Dakar Financing Conference held on 14-15 June 2014

S/N	List of Projects submitted to Dakar Financing Conference
1.	Abidjan-Ouagadougou-Bamako Multimodal Transport Corridor
2.	Abidjan-Lagos Coastal Corridor
3.	Batoka Gorge Hydropower project
4.	Brazzaville – Kinshasa Road and Rail project and Railway Line to Ilebo
5.	Dakar-Bamako Rail Revitalisation and Signalling
6.	Dar es Salam Port Expansion
7.	Douala-N'Gaoundéré-N'Djamena Corridor Project
8.	Juba-Torit-Kapoeta-Nadapal Road
9.	Jinja – Kampala Road Upgrading
10.	Lusaka – Lilongwe ICT
11.	Nigeria – Algeria Gas Pipeline
12.	North African Power Transmission Corridor
13.	Ruzizi III Hydropower Project
14.	Sambangalou Hydropower project
15.	Serenje – Nakonde Road (T2)
16.	Zambia-Tanzania- Kenya Power Transmission Line

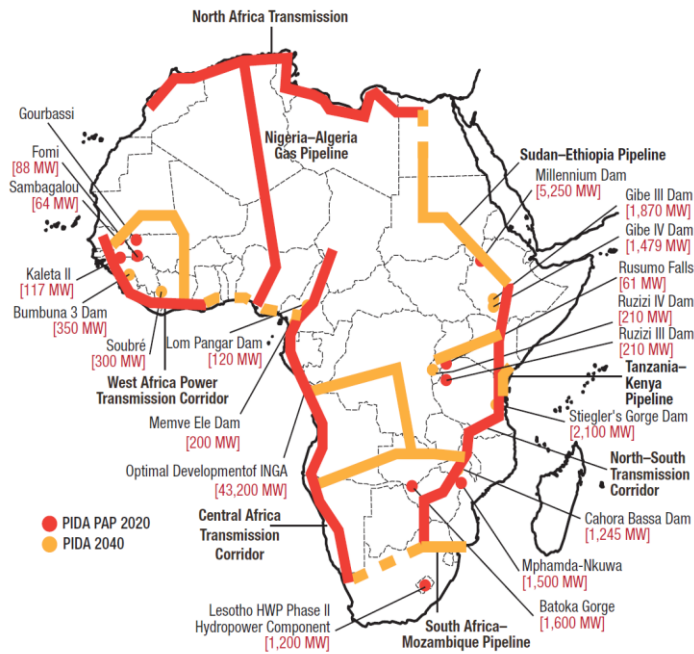
30. PIDA-PAP implementation on the ground

PIDA effective implementation on the ground will be soon assessed by the NPCA as per its responsibilities in the IAIDA and will be presented to the next meeting of the Steering Committee and then to the CID. In the mean time all activities leading to facilitate finance mobilization, capacity building and related to the implementation of projects that have reached financial closing since the launching of the PIDA PAP are ongoing..

Annex 1 : Targeted Infrastructure Maps by Sector

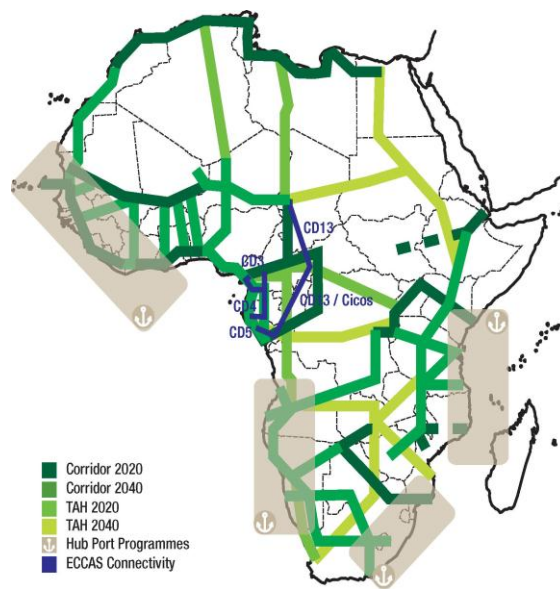
PIDA's energy impact

The energy infrastructure programme focuses on major hydroelectric projects and interconnects the power pools to meet the forecast increase in demand. Regional petroleum and gas pipelines are also included.



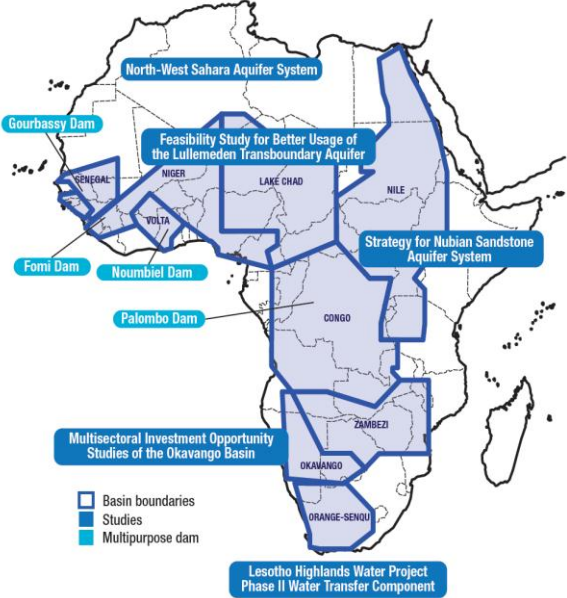
PIDA's transport impact

The transport programme links the major production and consumption centres, provides connectivity among the major cities, defines the best hub ports and railway routes and opens the land-locked countries to improved regional and continental trade.



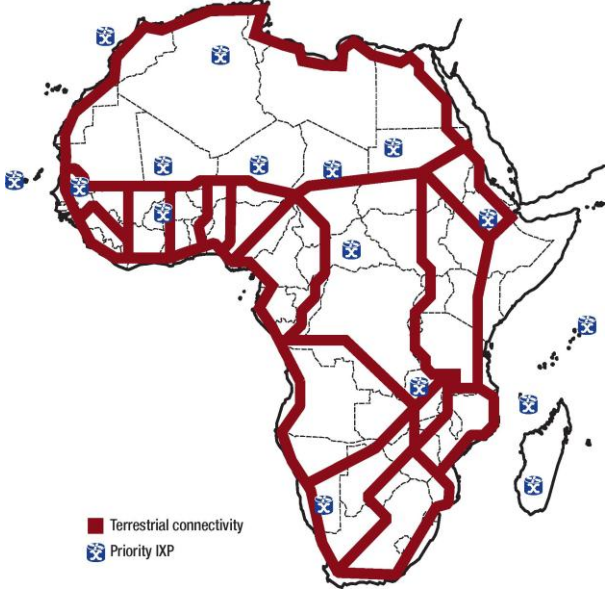
PIDA's transboundary water impact

The transboundary water programme targets the development of multipurpose dams and builds the capacity of Africa's lake and river basin organizations so that they can plan and develop hydraulic infrastructure. It would also help address by looming food security deficit.



PIDA's ICT impact

The ICT programme will establish an enabling environment for completing the land fibre-optic infrastructure and installing internet exchange points in countries without them. It will connect each country to two different submarine cables to take advantage of the expanded capacity. Map of 2020 Infrastrucure



Annex 2: List of PIDA PAP programmes and projects

Projects and programmes under the PAP represent the first batch of agreed priorities resulting from the analysis, criteria review and consultations on the REC master plans. It represents the priority pipeline required to meet the PIDA outcomes. Projects that are ongoing or that have reached financial close are not included. The PAP is not static and will be updated regularly to reflect progress and make way for new priorities as Africa's needs continue to evolve. This reflects the need to ensure coherence with REC master plans and consistency with the PIDA strategic framework. Therefore, the PAP should be viewed not as a single list cast in stone, but as the first (and necessary) step in a dynamic process for delivering the PIDA programme over the next three decades.

PAP project stages are defined as follows:

- S1 - early concept proposal
- S2 - feasibility/needs assessment
- S3 - programme/project structuring and promotion to obtain financing
- S4 - implementation and operation

a) PIDA PAP Energy SECTOR

Project	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
1. Great Millennium Renaissance Dam	Develop a 5,250 MW plant to supply domestic market and export electricity on EAPP market	S4	8,000	Ethiopia, Nile basin	COMESA/IGAD	Eastern
2. North-South Power Transmission Corridor	8,000 km line from Egypt through Sudan, South Sudan, Ethiopia, Kenya, Malawi, Mozambique, Zambia, Zimbabwe to South Africa	S2	6,000	Kenya, Ethiopia, Tanzania, Malawi, Mozambique, Zambia, Zimbabwe, South Africa	COMESA/EAC/SADC/IGAD	Southern
3. Mphamda-Nkuwa	Hydroelectric power plant with a capacity of 1,500 MW for export on the SAPP market	S2	2,400	Mozambique, Zambezi basin	SADC	Southern
4. Lesotho HWP phase II hydropower component	Hydropower programme for power supply to Lesotho and power export to South Africa	S2	800	Orange-Senqu River Basin	SADC	Southern
5. Inga III Hydro	4,200 MW capacity run of river hydropower station on the Congo river with eight turbines	S2	6,000	DRC Congo River	ECCAS	Central
6. Central African Interconnection	3,800 km line from the DRC to South Africa through Angola, Gabon, Namibia and to the north to Equatorial Guinea, Cameroon and Chad	S1	10,500	South Africa, Angola, Gabon, Namibia, Ethiopia	ECCAS	Central
7. Sambagalou	128 MW of hydropower capacity, 930 km from the mouth of the Gambia River to supply Senegal, Guinea, Guinea Bissau and Gambia	S3	300	Senegal, OMVG	ECOWAS	Western
8. West Africa Power Transmission Corridor	2,000 km line along the coast connecting with the existing Ghana-Nigeria line with a capacity of 1,000 MW	S2	1,200	Guinea, Guinea Bissau, Gambia, Sierra Leone, Liberia, Côte d'Ivoire, Ghana	ECOWAS	Western
9. North Africa Transmission	2,700 km line from Morocco to Egypt through Algeria, Tunisia and Libya	S2	1,200	Morocco, Algeria, Tunisia, Libya, Egypt	AMU	Northern
10. Kaleta	Hydropower generation of 117 MW	S3	179	Guinea – OMVG	ECOWAS	Western
11. Batoka	Hydroelectric plant with a capacity of 1,600 MW to enable export of electricity	S3	2,800	Zambia/Zimbabwe Zambezi basin	COMESA/EAC	Eastern
12. Ruzizi III	Hydroelectric plant with a capacity of 145 MW to share power among Rwanda, Burundi and DRC promoted by CEPGL	S3	450	Rwanda/DRC	COMESA/EAC	Eastern
13. Rusumo Falls	Hydropower production of 61 MW for Burundi, Rwanda and Tanzania	S3	360	Nile River Basin	COMESA/EAC	Eastern
14. Uganda-Kenya Petroleum Products Pipeline	300 km long pipeline for a lower cost mode of transport of petroleum products	S4	150	Uganda, Kenya	COMESA/EAC	Eastern
15. Nigeria-Algeria Pipeline	4,100 km gas pipeline from Warri to Hassi R'Mel in Algeria for export to Europe	S2	NA	Nigeria, Niger, Algeria	UMA/ECOWAS	Northern, Western

b) PIDA PAP Transport Sector

Programme	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
1. TAH programme	This is phase I of the continental connectivity programme that focuses on completion and standardization of the TAH missing links by 2030	S2/S3	2,150	Africa	Continental	Continental
2. Single African Sky phase 1 (design and initial implementation)	Single African Sky is a continental programme that will create a high-level, satellite-based air navigation system for the African continent	S3	275	Africa	Continental	Continental
3. Yamoussoukro Decision implementation	Accelerate Yamoussoukro Decision implementation by identifying countries that are ready to fully implement it, and discussing and agreeing with both their governments and airlines to launch the voluntary club on a full membership basis	S4	5	Africa	Continental	Continental
4. Smart corridor programme phase I	This programme includes both the development of model smart corridor technology and the design and the implementation of a continental and regional corridor efficiency monitoring system	S1	100	Africa	Continental	Continental
5. Northern Multimodal Corridor	This programme is designed to modernize the highest priority multimodal ARTIN corridor on modern standards (climbing lanes and urban bypasses) in East Africa. This programme aims to facilitate travel by people and goods across the borders between Kenya, Uganda, Rwanda, Burundi and DRC with a spur to South Sudan	S3/S4	1,000	Kenya, Uganda, Rwanda, Burundi	COMESA/EAC	Eastern
6. North-South Multimodal Corridor	This programme is designed to modernize the highest priority multimodal ARTIN corridor in Southern Africa on modern standards and facilitate travel of people and goods across the borders between South Africa, Botswana, Zimbabwe, Zambia, Malawi and DRC	S3/S4	2,325	DRC, Zambia, Zimbabwe, South Africa, Mozambique	COMESA/EAC/SADC	Eastern
7. Djibouti-Addis Corridor	This programme would resuscitate the rail system in a high priority multimodal ARTIN corridor in Eastern Africa and increase the flow of goods across the border between Djibouti and Ethiopia. It would also design and implement a smart corridor system for both road and rail transport	S3/S4	1,000	Djibouti, Ethiopia	COMESA/IGAD	Eastern
8. Central Corridor	This programme would modernize the third priority ARTIN corridor in East Africa and facilitate travel for people and goods across the borders between Tanzania, Uganda, Rwanda, Burundi and DRC	S3/S4	840	Tanzania, Uganda, Rwanda, Burundi, DRC	COMESA/EAC	Eastern
9. Beira-Nacala Multimodal Corridors	Rehabilitation/reconstruction of railway and road links, including one-stop border posts along the corridors. Improvement of capacity at the ports, including capital dredging at Beira Port. Natural resources development, including Moatize Coal Field in the Zambezi Valley will use the ports as main export gateways	S3/S4	450	Mozambique, Malawi, Zimbabwe	COMESA/SADC	Eastern
10. Lamu Gateway Development	This programme aims at responding to the Eastern Africa challenge in developing sufficient port capacity to handle future demand from both domestic sources and landlocked countries. The priority action will be to develop the Lamu gateway	S3/S4	5,900	Kenya, Uganda, Rwanda, Burundi	COMESA/SADC/EAC	Eastern
11. Southern Africa Hub Port and Rail Programme	This programme aims at responding to Southern Africa challenge in developing sufficient port capacity to handle future demand from both domestic sources and landlocked countries	S1	2,270	REC members	SADC	Southern
12. Abidjan-Lagos Coastal Corridor	This programme would modernize the most heavily travelled ARTIN corridor in West Africa (trade facilitation, OSBPs, capacity enhancement and implementation of PPP) for five countries: Côte d'Ivoire, Ghana, Togo, Benin and Nigeria	S3/S4	290	Nigeria, Benin, Togo, Ghana, Côte d'Ivoire	ECOWAS	Western
13. Dakar-Niamey Multimodal Corridor	This programme is designed to modernize the most heavily travelled ARTIN corridor in West Africa (trade facilitation, OSBPs, capacity enhancement and implementation of PPP) for four countries: Senegal, Mali, Burkina Faso, Niger	S3/S4	590	Senegal, Mali, Burkina Faso, Niger	ECOWAS	Western

Programme	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
14. Praia-Dakar-Abidjan Multimodal Corridor	<p>This programme would improve marine transport and the connection between island and mainland countries by creating a new maritime service between regional ports and facilitating this with a modern information system that links the maritime service with ports and road corridor in the Dakar-Abidjan Corridor.</p> <p>This programme would also modernize one of the most heavily travelled ARTIN corridor in West Africa (trade facilitation, OSBPs, capacity enhancement possibly through PPP) for eight countries: Cape Verde, Senegal, Gambia, Guinea Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire</p>	S2 to S4	150	Cape Verde, Senegal, Gambia, Guinea Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire	ECOWAS	Western
15. Abidjan-Ouagadougou/Bamako	This programme would modernize and rehabilitate the multimodal corridor that suffered during civil war in Côte d'Ivoire	S3/S4	540	Côte d'Ivoire, Burkina Faso, Mali	ECOWAS	Western
16. West Africa Hub Port and Rail Programme	This programme aims at responding to the future capacity problems in West African ports. This programme has two components: (a) a regional hub port and rail linkage master plan and (b) port expansion	S1	2,140	15 countries, PMAWCA	ECOWAS	Western
17. West Africa Air Transport	This programme aims at increasing the air transport service levels in West Africa, which are currently limited by the lack of a regional air hub	S1	420	15 countries	ECOWAS	Western
18. Pointe Noire, Brazzaville/Kinshasa, Bangui, N'djamena Multimodal Corridor	This multimodal programme would resuscitate the river transport in the Congo-Ubangi River Basin and modernize road transport along the corridor	S3/S4	300	Congo/DRC/ Central African Republic	ECCAS	Central
19. Kinshasa-Brazzaville Bridge Road and Rail Project & Rail to Ilebo	This programme would provide infrastructure to improve the regional transportation and trade systems through the construction of a fixed crossing linking Kinshasa and Brazzaville, ensuring continuity in railway traffic from Matadi and Pointe-Noire to the eastern border of the DRC and, beyond that towards the eastern and southern parts of Africa	S2	1,650	Congo/DRC	ECCAS	Central
20. Douala-Bangui Douala-N'djamena Corridor	This programme would modernize the highest priority multimodal ARTIN corridor in Central Africa and facilitate travel for people and goods across the borders between Cameroon, Chad and the Central African Republic	S3	290	Cameroon/ Central African Republic/ Chad	ECCAS	Central
21. Central African Inter-Capital Connectivity	This programme is specially designed for Central Africa, where one of the key issues for regional integration is the missing links in several inter-capital connectors	S2	800	Cameroon/Chad/ Central African Republic/Congo/DRC/ Gabon/Burundi/ Angola	ECCAS	Central
22. Central Africa Air Transport	This programme aims at increasing the air transport service levels as well as airport improvement in Central Africa, which are currently limited by the lack of a regional air hub	S1	420		ECCAS	Central
23. Central Africa Hub Port and Rail Programme	This programme aims at responding to the future capacity problems in Central African ports. This programme has two components: (a) a regional hub port and rail linkage master plan and (b) port expansion	S1	1,400	Cameroon/Chad/ Central African Republic/Congo/DRC/ Gabon/Burundi, PMAWCA	ECCAS	Central
24. Trans-Maghreb Highway	This programme is designed to improve travel for people and goods across the Maghreb countries, which have had their trade and travel limited by artificial barriers between countries at the borders. This programme would design and implement a smart corridor system along the highway and install one-stop border posts	S3/S4	75	Morocco to Egypt through Algeria, Tunisia and Libya	AMU	Northern

c) PIDA PAP Transboundary Water Sector

Project	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
1. Palambo	Regulation dam to improve navigability of Obangui River with added hydropower component	S2	155	Congo River Basin	ECCAS	Central
2. Fomi	Hydropower station in Guinea with irrigation water supply for Mali and regulation of the Niger river (nine countries)	S3	384	Niger River Basin	ECOWAS	Western
3. Multisectoral Investment Opportunity Studies	Identification and preparation of investment programmes in the basin	S1	1	Okavango River Basin	SADC	Southern
4. Lesotho HWP Phase II – water transfer component	Water transfer programme supplying water to Gauteng Province in South Africa	S3	1,100	Orange-Senqu River Basin	SADC	Southern
5. Gourbassy	Multipurpose dam located in Guinea: regulation of the Senegal river (four countries)	S2	NA	Senegal River Basin	ECOWAS	Western
6. Noumbiel	Multipurpose dam with hydropower generation (for Burkina Faso and Ghana) component	S1/S2	NA	Volta River Basin	ECOWAS	Western
7. Nubian Sandstone Aquifer System	Implementation of regional strategy for the use of the aquifer system	S4	5	Nubian Sandstone Aquifer System	UMA	Northern
8. North-West Sahara Aquifer System	Prefeasibility studies for improved use of the aquifer system	S2	2.5	North West Sahara Aquifer System	UMA	Northern
9. Lullemeden Aquifer System	Prefeasibility studies for improved use of the aquifer system	S2	10	Lullemeden and Taoudeni/Tanezrouft Aquifer System	UMA	Northern

d) PIDA PAP ICT Sector

Programme	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
1. ICT Enabling Environment	This programme would improve the environment for the private sectors to invest in high-speed broadband infrastructure	S2	25	Continental	Continental	Continental
2. ICT Terrestrial for Connectivity	This programme has two main components: secure each country connection by at least two broadband infrastructure and ensure the access to submarine cable to all landlocked countries	S3	320	Continental	Continental	Continental
3. Internet Exchange Point (IXP) programme	The aim of this programme is to provide Africa with adequate internet node exchange to maximize internal traffic	S3	130	Continental	Continental	Continental