



Economic Affairs Departement

Statistics Division

METHODOLOGICAL GUIDELINE FOR THE INTEGRATION OF THE PRINCIPLES OF THE AFRICAN CHARTER ON STATISTICS (ACS) AND THE STRATEGY FOR THE HARMONISATION OF STATISTICS IN AFRICA (SHaSA) IN THE NATIONAL STRATEGY FOR THE DEVELOPMENT OF STATISTICS (NSDS)

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1 Introduction

This document maps the African Charter on Statistics (ACS) and the Strategy for the Harmonisation of Statistics in Africa (SHaSA) onto the National Strategy for the Development of Statistics (NSDS). It outlines a process for the design and implementation of a generic NSDS on which ACS principles and SHaSA strategic themes and objectives are overlaid. The document also provides guidelines for implementation of the integrated strategy.

The NSDS process is broadly in conformity with the new methodological guidelines, albeit still under development, for the design and implementation of NSDSs currently being developed by the consortium *Partnerships in Statistics for Development in the 21st Century* (PARIS21). A highly simplified mapping of the NSDS process is illustrated in Table 1.

Table 1: Phases and steps in the NSDS development process

Phases		Steps	
1	Preliminary	1	Acknowledging
		2	Understanding
		3	Preparing
2	Design	4	Assessing
		5	Envisioning
		6	Identifying strategic goals
		7	Elaborating action plans
3	Implementation	8	Implementing

The NSDS process is presented in tabular form. Each step is outlined in a table under four column headings - strategic objective, strategic output, activity, and guideline - under a strategic outcome to which they subscribe. The relevant ACS and SHaSA sections are indicated by colour code.

2 Phase 1: Preliminary Phase

The Preparatory Phase is about generating support for the NSDS. It consists of three steps - acknowledgement of the need for a NSDS; understanding of the need for a NSDS; and preparing for the NSDS.

2.1 Phase 1: Step 1 – Acknowledging the need for statistics

The focus for the acknowledging step is to create awareness among stakeholders of the need for a NSDS and by implication the NSS.

Table 2: Strategy for step 1 – Acknowledging the need for statistics

Strategic objective	Strategic output	Activity	Guideline
Strategic Outcome: Stakeholder awareness of the NSDS			
Sensitising government leadership	NSS concept document (why, what, how – focus on coordination of the system)	Advocate for statistical coordination	<ul style="list-style-type: none"> Explain to stakeholders what the NSS is Develop a concept or framework document for stakeholders Use different media (hardcopy, brochures, slides, etc.) to reach different stakeholders
	Statistical Coordination Policy Framework (ID policy areas to regulate statistical production and coordination)	Advocate for adoption of the Statistical Coordination Policy Framework by the government	<ul style="list-style-type: none"> Identify statistical domains for which political support is needed Develop a policy document for approval by political principals to support statistical work in the statistical domains
	NSDS Reference document (discussion on current statistical environment – raises issues to address in the NSDS)	Advocate for support for the NSDS by the government	<ul style="list-style-type: none"> Explain the need for a national strategy for statistical development to political principals Develop an NSDS framework document for consumption by stakeholders
Engage policy makers and legislators in statistical discourse	Annual report on engagement with government, parliament, civil society and the private sector (SHaSA: 4.1.1)	Cabinet memo Presentation to Parliament Meetings with civil society and private sector	<ul style="list-style-type: none"> Put in place a programme to popularise the need for statistics with policy makers and legislators Put in place a programme to create awareness that statistical data are not to be used for judicial proceedings or punitive measures (ACS: 5.3.2) Undertake statistical gap analyses in selected domains to impress upon stakeholders how they could add value to their occupations with statistics

2.2 Phase 1 .Step 2 – Understanding the need for statistics

Understanding of what is required to design and implement the NSDS, and by extension the NSS, should be centred on stakeholder participation. Accordingly the single most important strategic outcome of this step is stakeholder ownership of the NSDS.

Table 3: Strategy for step 2 – understanding the need for statistics

Strategic objective	Strategic output	Activity	Guideline
Strategic Outcome: Stakeholder ownership of the NSDS			
Getting buy-in from stakeholders	Stakeholder database	Stakeholder analysis	<ol style="list-style-type: none"> 1. Develop a programme to identify stakeholders 2. Document stakeholders by domain of statistical production
	Advocacy strategy (SHaSA 4.2.2)	Develop advocacy programme	<ol style="list-style-type: none"> 1. Sensitise stakeholders about the NSS and NSDS 2. Managing for results (ACS: 2.10.1; 6.1.9) 3. Raise the profile of statistics 4. Use statistics as evidence for decision-making (ACS: 2.10.2) 5. Promote a culture of using statistics for evidence (ACS: 2.10.5) 6. Promote statistical literacy in the general population (ACS: 2.10.4)
		Develop advocacy toolkit	<ol style="list-style-type: none"> 1. Sensitise stakeholders about the NSS and NSDS 2. For managing for results (ACS: 2.10.1) 3. Raise the profile of statistics 4. Using statistics as evidence for decision-making (ACS: 2.10.2) 5. Promote a culture of using statistics for evidence (ACS: 2.10.5) 6. Promote statistical literacy in the general population (ACS: 2.10.4)

2.3 Phase 1: Step 3 - Preparing

Step 3 of the Preparatory Phase is preparing for phases 2 and 3, the design and implementation of the NSDS, respectively. The strategic outcome for this step is stakeholder commitment to the NSDS process.

Table 4: Strategy for step 3 – preparing

Strategic objective	Strategic output	Activity	Guideline
Stakeholder commitment to the NSDS process			
Commit stakeholders to the NSDS process	NSDS Design Team	Constitute a NSDS Design Team	<ol style="list-style-type: none"> 1. Identify high profile credible individuals as potential team members 2. Select a core team of 3-4 individuals to actually work on the NSDS design 3. Select a broader team to support the core team with diverse responsibilities
	NSDS design roadmap	Design document and agree on roadmap	<ol style="list-style-type: none"> 1. Develop a consultative programme for the design of the NSDS 2. Draft a working document of the design roadmap 3. Dialogue the draft document with stakeholders on a domain basis
	Stakeholder constituency	Identify key stakeholders to advance the NSDS cause	<ol style="list-style-type: none"> 1. Define criteria for membership of the team 2. Select a minimum number of influential stakeholders to continuously advocate for the NSDS and the work of the Design Team
	Communication strategy	Put together a communication programme	<ol style="list-style-type: none"> 1. Compile a strategic communication programme <ul style="list-style-type: none"> • Compile a communication plan by phase and step (e.g. phase 1 step 3)
	Leadership and management	Identify <ul style="list-style-type: none"> • leadership at political and institutional levels; and • management at operational levels 	<ol style="list-style-type: none"> 1. Define a process for constituting a guiding coalition for the NSDS (different from the Design Team) <ul style="list-style-type: none"> • Set up a secretariat for NSDS • Select a political champion • Find an institutional head (non-political) for the NSDS • Identify effective managers for NSDS operations

3 Phase 2: Design

The design phase of the NSDS consists of four steps – a situational analysis of the NSDS, envisioning the strategy, identifying strategic goals, and elaborating strategic action plans. This is when actual work on the NSDS commences.

3.1 Phase 2: Step 4 - Assessment

Step 4 is the beginning of the design phase. It is about assessment of the current status of the NSS on which the NSDS is to be founded. The purpose of the NSDS is to comprehensively integrate the existing statistics system in terms of coverage, quality and capacity in order to deliver official statistics as demanded. The assessment should adopt an in-depth approach intended to identify gaps both in the statistical outputs and process and in the management of the system. It consists of three strategic outcomes – assessment of the current status of the NSS, assessment of the NSS regulatory framework, and assessment of the NSS management framework.

Table 5: Strategy for step 4 – assessment of the status of the NSS

Strategic objective	Strategic output	Activity	Guideline
Strategic Outcome: Established status of the NSS			
Identifying demand for statistics (ACS: Quality-2.1 Relevance)	Information on user satisfaction (ACS: 2.1.3)	Establish quality and data gaps from user satisfaction survey	<ol style="list-style-type: none"> Put a programme and process in place for assessing user satisfaction (e.g. desktop research, questionnaire, etc.) (ACS: 4.1.4) Undertake a user satisfaction survey by domain of production and availability of data
	Information on user needs defined <ul style="list-style-type: none"> Current/ Future Topicality (ACS: 2.8.1; 3.3.8) Rationality (ACS: 5.4.2) Gap identification (ACS: 2.1.1 & 2.1.2) 	Undertake <ul style="list-style-type: none"> Database of external and internal users a survey of user needs an inventory of existing data (ACS: 2.9.1) (ACS: 5.4.3) 	<ol style="list-style-type: none"> Put in place a process to inventory the current and likely future demand for statistics (ACS: 4.2.2) Undertake <ul style="list-style-type: none"> Database of external and internal users Group users according to needs (ACS: 4.2.1) a survey of user needs (ACS: 4.2.3) an inventory of existing data (ACS: 2.9.1; 5.4.3; 4.1.3;) an inventory matching available data according to market segment (ACS: 4.1.5)
Assessing the quality of key	Quality gap defined	Assess key statistical products	<ol style="list-style-type: none"> Put in place a process for assessing the quality of statistical products in organs of state

Strategic objective	Strategic output	Activity	Guideline
statistical products ¹		for quality against an agreed framework	<ol style="list-style-type: none"> 2. Assess for quality a key statistical product of an organ of state 3. State the status of the quality of statistics
Diagnosing the statistical process (methodology)	Diagnostic reports of statistical processes	Assess <ul style="list-style-type: none"> • statistical processes and products for quality constraints • past data collection activities 	<ol style="list-style-type: none"> 1. Put in place a process for diagnosing statistical process (methodology), including methodologies used in the past 2. Do a diagnosis of the statistical process in respect of survey and administrative data collections of an organ of state 3. State the status of the statistical process
Diagnosing statistical capacity	Diagnostic reports of statistical capacity	Assess statistical capacity gaps (infrastructure, skills, resources, etc.) against data needs and gaps	<ol style="list-style-type: none"> 1. Establish a process for diagnosing statistical capacity in the NSS 2. Do a diagnosis of statistical capacity in respect of a statistical series in an organ of state 3. State the status of the statistical skills
Strategic outcome: Established NSS regulatory framework			
Identifying gaps in statistical legislation (reviewing legislation)	A report on gaps in the legislation	Review all legislation on statistical production in all organs of state	<ol style="list-style-type: none"> 1. Assess statistical legislation against ACS principles 2. Compile an inventory of legislation on statistical production in all organs of state 3. Map statistical legislation against the principles of the ACS 4. State the gaps in the statistical legislation
Strategic outcome: Established NSS management framework			
Identifying gaps in the institutional and management framework	A gap analysis of management in the NSS	Identify management challenges <ul style="list-style-type: none"> • At NSS level • At sector level • Organ of state level 	<ol style="list-style-type: none"> 1. Define a process to assess management of the NSS 2. Identify gaps in the management system of the NSS at <ul style="list-style-type: none"> • system level; and • organ-of-state level
	A review of the institutional framework (SHaSA 3.1.2 & SHaSA 3.1.3)	Identify institutional areas in the NSS in need of strengthening political support	<ol style="list-style-type: none"> 1. Specify areas of statistical coordination that require political support (e.g. managing for results, advocacy, budget, etc.)
		Review the status of the statistics authority, other producers of	<ol style="list-style-type: none"> 1. Define the statistics organisational model for the NSS, the statistics authority and the statistics board/council 2. Identify gaps in the current organisational

¹ Emphasis of the assessment would be more on developmental aspects than on designation for official status

Strategic objective	Strategic output	Activity	Guideline
		statistics in the NSS and the statistics board/council	model 3. Identify gaps in the implementation of current legislation
		Review the status of governance structures in the NSS	1. Identify gaps in the implementation of current legislation
	A human capacity needs assessment	Carry out a human capacity assessment for <ul style="list-style-type: none"> • Coordinating the NSS • individual organs of state 	1. Put in place a process to assess human capacity both in the NSS and in individual organs of state 2. Assess capacity to coordinate the NSS; and 3. Assess statistical capacity in organs of state
	Situational analysis	Undertake a SWOT analysis of the NSS	1. Set up a process to assess organisational (environmental) factors that influence production of statistics; e.g. political, legislative and institutional environments

3.2 Phase 2: Step 5 - Envisioning the NSDS

Envisioning is a logical progression from assessment of the statistics system. It is about development of a vision, a mission, and values for the NSS. Envisioning is an essential element of strategic planning as it establishes the vision and mission of an organisation or system. The vision, mission and values should be continuously communicated to stakeholders to the point that stakeholders can easily remember them so they can apply them to their daily work. They should be assimilated into the culture of the NSS through internal dialogue (with staff in the system) and external dialogue (with stakeholder beneficiaries of the system). They should also be acknowledged as tools for leadership and organisational change. Finally they should be used to motivate and inspire staff.

Table 6: Strategy for step 5 – envisioning the NSS

Strategic objective	Strategic output	Activity	Guideline
Strategic outcome: Strategic direction for statistical development in the country			
Envisioning the end-state of the NSS	Vision statement	Dialogue a vision statement with stakeholders	1. Develop a vision statement aligned with the national development strategy. The vision statement to include the main goal of the NSDS, for example <ul style="list-style-type: none"> • meeting user needs; • producing quality statistics; • developing statistical capacity; • coordinating statistical production
Summarising the core business of the NSS	Mission statement	Dialogue a mission statement with stakeholders	1. Develop a mission statement by summarising the business of the NSS in terms of its contribution to the mission in the national development strategy. Derive the mission from the legislation that defines the mandate of the NSS or statistics authority, including <ul style="list-style-type: none"> • aim of the strategy; • key stakeholders; • value add of strategy to stakeholders; • uniqueness of products of strategy
Defining values for the NSS and individual organs of state	Statement of values	Dialogue a set of values with stakeholders	1. Analyse existing organisational culture to identify what to change, keep and promote at system level. Ensure values <ul style="list-style-type: none"> • are performance-based to promote a culture of management for results; and • reflect the principles of the ACS and the Fundamental Principles of Official Statistics 2. Develop a set of values to express the philosophical, moral or ethical underpinnings of the wider society
		Support individual	1. Analyse existing organisational culture to identify what to change, keep and promote at organ-of-

Strategic objective	Strategic output	Activity	Guideline
		organs of state with statements of values for their statistical systems	state level 2. Ensure values <ul style="list-style-type: none"> • are performance-based to promote a culture of management for results; and • reflect the principles of the ACS and the Fundamental Principles of Official Statistics 3. Develop a set of values to express the philosophical, moral or ethical underpinnings of the wider society
	Code of ethics/ good practice ACS: 1.1.3	Dialogue a code of ethics	1. Define standards or rules to guide behaviour or conduct for specific situations inside or outside the NSS or organ of state 2. Develop a set of standards to promote the principles of the ACS (e.g. confidentiality in relation to microdata)

3.3 Phase 2: Step 6 - Identifying strategic goals

The terms “goal” and “objective” tend to have interchangeable meanings depending on context or on who is using them. It is therefore very important for stakeholders to agree to a specific definition for each of them. What is important and required is consistency of definition(s) and application. Oftentimes a strategic goal is general in nature such that it is expressed in non-technical qualitative rather than quantitative terms. Strategic objectives are expected to be **s**pecific, **m**easurable, **a**chievable, **r**elevant, and **t**ime-bound (SMART).

The importance of strategic goals and objectives should be emphasised as the driving force behind the implementation of the strategy. This step is critical to ensure the alignment to the African Integration Agenda and measurement of the national development agenda.

Table 7: Strategy for step 6 – identifying strategic goals

Strategic objective	Strategic output	Activity	Guideline
Strategic Outcome: Agreement on desired results from the NSS			
Identifying for the NSS sectoral or high level domains of statistical production	Sectoral or high level domains of statistical production defined for the NSS	For the NSS identify sectors of statistical production (country specific) that is aligned to national priorities	<ol style="list-style-type: none"> 1. Identify strategic outcomes in national plan and other stakeholder needs 2. Identify linkages to align statistical production to requirements for information in national plan and other stakeholder needs 3. Define sectors/ domains for statistical production, e.g. <ul style="list-style-type: none"> • Health • Education • Economic growth 4. Define statistical programme and outputs to respond to information needs of the country
		Align sectors for statistical production to African Integration Agenda (SHaSA: p16, Table 3)	<ol style="list-style-type: none"> 1. Map sectors/domains for statistical production against Integration Agenda (statistical dimension), e.g. <ul style="list-style-type: none"> • Political, governance and regional integration • Economic integration • Social and cultural integration 2. Identify gaps 3. Map statistical programmes and outputs against the Strategic matrix (SHaSA: p 44) 4. Align sectors and statistical programme
Defining what is to be	Compendia of indicators	Identify indicators for each sector of	<ol style="list-style-type: none"> 1. Define national set of indicators for each sector

Strategic objective	Strategic output	Activity	Guideline
measured		statistical production (national)	<ol style="list-style-type: none"> 2. Include indicators of the African Statistical System (ASS) (SHaSA: 2.3.2) as defined by the Specialised Technical African Groups 3. Prioritise measurement 4. Match existing series for measurement of indicators and revise where applicable 5. Introduce new series where applicable
Identifying priorities for the NSS	Compendium of statistical priorities	Identify priorities for the NSS in line with national priorities	<ol style="list-style-type: none"> 1. Identify statistical priorities for the strategy within the scope of available resources, noting CRVS as the priority for ASS (2012 – 2017) 2. Identify sector statistical priorities within the scope of available resources 3. Identify regional and continental priorities as defined by the ASS (SHaSA: 2.3.1) 4. Review priorities for contemporariness/topicality/changes or policy development (ACS: 2.3.3; 2.8.3; 2.8.5; 2.11.2) 5. Confirm statistical priorities with state agencies 6. Secure approval from executive authority
Strategic outcome: Strategic direction for national statistical development			
Identifying strategic goals	Strategic goals, objectives and strategies	Define <ul style="list-style-type: none"> • goals of the NSS • objectives of the NSS (SMART attributes) • sector strategies 	<ol style="list-style-type: none"> 1. Translate SWOT analysis into strategic outcomes and objectives 2. Map NSDS strategic objectives against strategic themes and objectives of SHaSA 3. Develop a strategy map 4. Define national goals and targets to achieve objectives 5. Define sector strategies in NSDS

3.4 Phase 2: Step 7 - Elaborating action plans

Step 7 of the design phase is about an action plan to implement the NSDS at the level of statistical production systems.

The plan for implementation is in five sections:

- a) Section 1: Regulatory and management framework;
- b) Section 2: Human capacity development;
- c) Section 3: Physical and statistical infrastructure; and
- d) Section 4: Statistical production and management.
- e) Section 5: Funding the NSDS

3.4.1 Phase 2: Step 7 – Section 1: Regulatory and management framework

The backbone of a regulatory framework for official statistics is statistical legislation (both primary and subordinate). It is a prerequisite for an effective statistics system in the sense that it defines the system, including the roles and responsibilities of stakeholders, system safeguards, and regulation of its management and operations.

It is now universally accepted that official statistics are a strategic resource intended to facilitate a culture of managing for results, transparency and accountability in government and the public service. Because the government and the public service constitute a complex system, the approach to managing implementation of the NSDS and, by implication, the NSS should be system-wide² and therefore holistic.

Table 8a: Strategy for Step 7, Section 1 – elaborating an action plan for implementing a regulatory and management framework

Strategic objective	Strategic output	Activity	Guidelines
Strategic outcome: Conducive regulatory environment for statistical production and coordination			
Rationalising legislation on official statistics	An amended Statistics Act (SHaSA: 3.1.1)	Amend the Statistics Act to include recommendations in Part 2	<ol style="list-style-type: none"> 1. Conduct self assessment to identify gaps in the statistical legislation using the AU assessment tool 2. Propose amendments to the statistical legislation 3. Develop subordinate legislation where required 4. Follow country legislative process to implement changes 5. Define statistical practice to implement the Act
Strategic Outcome: Intra-governmental collaboration			
Defining coordination mechanisms for the NSS	Coordination and management framework document	Define coordination instruments	Develop coordination mechanisms, namely: <ol style="list-style-type: none"> 1. Statistical plans and reports (ACS: 6.1.2) 2. A professionalised body of statisticians 3. A Statistical Clearing House 4. Statistical forums 5. Management System for Statistical Information (MSSI) 6. Statistical standards (ACS: 6.1.4) 7. Quality assessment framework 8. Code of ethics 9. Technical support programme 10. Training programme

² PARIS21 (2007b)

Strategic objective	Strategic output	Activity	Guidelines
Defining management mechanisms for the NSS	Governance and management structure for the NSS (ACS: 6.1.8) (ACS: 6.1.13)	Design a governance and management structure for the NSS	Develop management mechanisms: 1. Establish an approval process for statistical plans in the NSS (ACS: 5.4.4; 6.1.2) 2. Design a governance structure for the NSS (ACS: 6.1.8), including organisation between organs of state 3. Design a management structure for the NSS (ACS: 6.1.13); i.e. organisational structure at the statistics authority responsible to coordinate statistics as defined in legislation 4. Define Head of the government statistical system 5. Define responsibilities of the statistics council/board in relation to the NSDS and the NSS
Strategic Outcome: Positioning statistics in government and the state			
Establishing statistics units/ statistical information system in organs of state	Blueprint for the establishment of statistical information systems in organs of state	Identify the structure responsible for statistics within an organ of state	1. Include the establishment of statistics units/statistical information systems by organs of state in statistical legislation 2. Define functions, roles and responsibilities of the statistics unit/statistical information system 3. Define the functioning of the statistical information system
Raising the profile of statistics in government	A political champion for the NSDS and the NSS	Identify a political champion for the NSDS and the NSS	1. Define political institutions for leading statistical coordination; e.g. a political committee for statistics 2. Identify political champion for the NSDS and NSS; e.g. a parliamentary committee for statistics
Mainstreaming statistics into the planning and development initiatives of the state (ACS: 6.1.12) (SHaSA: 3.1.4)	National development plan and development outcomes of the country informed by official statistics (ACS: 6.1.9)	Define the use of statistics to inform <ul style="list-style-type: none"> • National Development Plan • Sector plans • Plans of organs of state 	1. Specify the use of official statistics in statistical legislation by state agencies in planning, policy development, monitoring and evaluation; and decision-making 2. Promote the use of statistics in planning and development initiatives 3. Make statistics easy for use 4. Make statistics easily accessible to users

3.4.2 Phase 2: Step 7 – Section 2: Human capacity development

Developing skills for the NSS is a long-term process that requires sustained investment in people. Return on investment will be through the improved efficiency with which the governments will allocate resources between competing public demands for services. The main outcome of staff empowerment is sustained human capacity for the NSS,

Table 8b: Strategy for Step 7, Section 2 – elaborating an action plan for implementing a human capacity development framework

Strategic objective	Strategic output	Activity	Guideline
Strategic outcome: Sustained human capacity for the NSS			
Developing human resources for the NSS	Human capacity development strategy	Design a human capacity development strategy for the NSS	<ol style="list-style-type: none"> 1. Conduct environmental scan 2. Carry out a human capacity needs assessment 3. Identify skills gap 4. Define strategies to strengthen/establish in-service training centres (SHaSA 3.2.2) 5. Define strategies to strengthen/establish statistical schools/centres (SHaSA 3.2.3) 6. Define participation in international statistical training programmes (SHaSA 3.2.4) 7. Define Young Statistician capacity building programme (SHaSA 3.2.5) 8. Define statistical capacity development strategies for individual organs of state/sectors <p>Reference should be made in the NSDS to the capacity development strategy for statistical development</p>
	Statistical training strategy	Design a staff development and training programme to cover all types of skills required by a statistics system	<ol style="list-style-type: none"> 1. Identify existing training programmes in the country <ul style="list-style-type: none"> • Training centres/schools • Tertiary institutions • Service providers 2. Match training programmes with skills gap 3. Develop training programme and plan for the NSS (ACS: 3.2.3) 4. Develop new training programmes <ul style="list-style-type: none"> • Advocacy and awareness building (ACS 2.10.2) • Media (ACS 2.10.3) • Statistical literacy (ACS 2.10.4) • Users (ACS: 4.3.6) 5. Expand/improve existing training

Strategic objective	Strategic output	Activity	Guideline
			<p>programmes</p> <p>Reference should be made in the NSDS to the statistical training plan and programme for the NSS</p>
	Human resource strategy and practices	Define a human resource philosophy (management style, staff motivation, etc.) and practices for the NSS	<p>1. Set up formal systems for human resource management</p> <ul style="list-style-type: none"> • Generic job descriptions/specifications • recruitment of staff for the NSS • staff retention in the NSS • career paths in the NSS • skills improvement in the NSS • performance incentives in the NSS <p>Reference should be made in the NSDS to the human resource philosophy and practices for the NSS</p>

3.4.3 Phase 2: Step 7 – Section 3: Physical and statistical infrastructure

Physical infrastructure constitutes part of the capacity of the NSS. It consists of two parts – physical infrastructure such as space for operations; transport facilities; ICT infrastructure (including GIS); and secondly statistical infrastructure such as frames and statistical tools.

Table 8c: Strategy for Step 7, Section 3 - elaborating an action plan for implementing physical and statistical infrastructure

Strategic objective	Strategic output	Activity	Guideline
Strategic outcome: Sustainable physical infrastructure			
Create conducive statistical infrastructure and environment	Office accommodation	Procuring space for NSS operations	<ol style="list-style-type: none"> 1. Secure premises for statistical work including training 2. Establish fieldwork infrastructure across the country for data collection (preferably the NSO) 3. Establish data processing infrastructure 4. Secure premises for storage and retrieval of survey questionnaires (warehouse) 5. Secure transport facilities for fieldwork operations
	ICT infrastructure	Establishing an effective technological environment	<ol style="list-style-type: none"> 1. Establish infrastructure for ICT 2. Build a statistical data warehouse (SHaSA: 3.3.2) 3. Build a NSS GIS and database infrastructure 4. Develop databases for specific series 5. Set up an ITC system for: <ul style="list-style-type: none"> • Movement of data within the NSS • User access to indicators • Archiving and retrieval of data (microdata for time series analysis) ACS: 2.2.2) 6. Standardise dissemination tools and platforms (SHaSA: 3.3.3) 7. Automate routine clerical operations (e.g. data capture, coding and validation) (ACS: 3.3.10) 8. Optimise use of ICT for data collection, processing and dissemination (ACS: 3.3.11) 9. Make provision to protect the security and integrity of statistical data bases (ACS: 5.2.2)
Strategic outcome: Sustainable statistical infrastructure			
Develop and maintain frames for	Enumeration frame Dwelling frame	Develop frames for the collection of household	<ol style="list-style-type: none"> 1. Build dwelling frame <ul style="list-style-type: none"> • Secure GIS information from local government and/or other relevant

Strategic objective	Strategic output	Activity	Guideline
collection of statistics and use by NSS partners	Master sample	information ACS: 2.5.1	<ul style="list-style-type: none"> institutions <ul style="list-style-type: none"> • List dwelling structures • Allocate addresses • Review, maintain and update changes in geography (ACS: 2.11.13) 2. Build enumeration frame <ul style="list-style-type: none"> • Develop standards and methodology for enumeration • Demarcate enumeration areas • Review, maintain and update changes in geography (ACS: 2.11.13) 3. Design master sample <ul style="list-style-type: none"> • Develop standards and methodology for designing primary sampling units • Draw master sample • Review, maintain and update changes in the master sample (ACS: 2.11.13) • Use master sample as a common frame for collection of household surveys
	Business Frame	Develop a frame for business surveys ACS: 2.5.1	<ol style="list-style-type: none"> 1. Adapt International Standard for Industry Classification (ISIC4) for country situation 2. Compile a list of businesses <ul style="list-style-type: none"> • Download from revenue service • Conduct fieldwork 3. Profile and classify businesses 4. Compile annual snapshot for sampling purposes 5. Review, maintain and update business frame (ACS: 2.11.13)
Develop and maintain administrative records for statistical purposes	Registers in the NSS	Improve quality of registers	<ol style="list-style-type: none"> 1. Develop a statistical business process model for administrative records 2. Adopt international standards 3. Develop NSS statistical standards aligned to ASS 4. Assess quality of registers 5. Develop quality improvement plan
Develop statistical tools	Statistical quality management framework	Establish and implement a statistical quality management system (ACS: 3.3.5)	<ol style="list-style-type: none"> 1. Develop a quality management policy for statistical production (ACS: 1.2.2; 1.3.3; 2. Adapt the generic statistical process model for surveys and administrative data (statistics value chain) ACS: 1.1.2; 2.11.1 3. Compile a national compendium of concepts and definitions ACS: 2.5.1; 2.6.1; 4. Establish a metadata registry (store) 5. Develop methodological guidelines (ACS:

Strategic objective	Strategic output	Activity	Guideline
			<p>1.3.1; 1.4.1; 1.4.2; 2.6.2; 2.6.3; 2.6.4; 2.6.5; 2.9.2 and SHaSA: 1.2.1; 1.2.2; 1.3.1; 4.2.1)</p> <p>6. Develop guidance documents (such as policies and protocols) ACS: 1.2.2; 1.2.3; 1.3.2; 2.2.3; 2.3.4; 2.3.6; 2.4.4; 2.8.4; 3.3.6; 4.1.6; 4.3.1; 4.3.4; 4.4.2;</p> <p>7. Develop statistical standards and measures ACS: 2.4.1; 2.4.2, 2.4.3; 2.7.4; 2.8.3</p>

3.4.4 Phase 2: Step 7 – Section 4: Statistical production and management

Data production and management is the most acknowledged and visible of the statistical production process mainly because it is a front-end stage, interfacing with users. The stage has two strategic outcomes – increased trust in statistics and management of statistics. This stage is crucial for the sustainability of the NSS because it is associated with *trust* from users. Because the NSDS is to be built on what already exists, an introspection of issues of trust currently affecting NSS should be undertaken. External trust arises from the fact that the strategy is demand-orientated. Internal trust is a reflection of staff identification with the department and what it stands for. It is a result of a motivated staff and has a bearing on staff loyalty which reduces staff turnover. Trust is a result of perceived *independence* of the processes of production and management of statistics. Perceived independence, in turn, results from perceived *professionalism* of the staff. A code of ethics (practice or conduct), when effectively implemented, is a necessary condition for professionalism. Independence and professionalism should be institutionalised not only through a code of ethics but legislatively as well.

Table 8d: Strategy for Step 7, Section 4 - elaborating an action plan for implementing statistical production

Strategic objective	Strategic output	Activity	Guidelines
Strategic outcome: Increased trust in statistical products			
Improve quality of statistical outputs	Administrative data	Develop a process for management of administrative data	Administrative data: Planning <ul style="list-style-type: none"> Establish a statistical planning process to assure relevance by determining information needs (understand policy, administrative and statistical needs) prioritising information needs (ACS: 2.11.2) developing a policy prioritising administrative records over surveys (ACS: 5.4.1)
	Survey data	Develop a process for management of surveys and censuses	

Strategic objective	Strategic output	Activity	Guidelines
			<ul style="list-style-type: none"> • ensuring agreed design principles for administrative system (mutually beneficial) • including well-defined and designed collection requirements for the administrative system • ensuring the implementation of common methods and standards (SHaSA: 1.3.4) <p>Survey data: Design</p> <ol style="list-style-type: none"> 1. Establish a process for the design of statistical production activities (ACS: 2.11.3) <ul style="list-style-type: none"> • Design questionnaires • Testing questionnaires (ACS: 2.11.11) • Survey design, sample selection methodology, sample weighting & methodology (ACS: 2.11.12) • Ensure collection instruments are respondent friendly to effectively collect information, and are efficient (ACS: 3.3.4) <p>Administrative data: Build</p> <ol style="list-style-type: none"> 2. Establish a process for building systems and tools for movement, storage and retrieval of data (ACS: 2.11.4) <p>Survey data: Build</p> <ol style="list-style-type: none"> 3. Establish processes for building survey systems and tools for collection, processing, analysis, dissemination, movement, storage and retrieval of data (ACS: 2.11.4) <p>Administrative data: Collect</p> <ol style="list-style-type: none"> 4. Establish a data acquisition process for transforming administrative records systems into statistical registers (snapshots) (ACS: 2.11.5) <p>Survey data: Collect</p> <ol style="list-style-type: none"> 4. Establish collection processes for business and household surveys (ACS: 2.11.5). <ul style="list-style-type: none"> • Monitor and revise field operations (ACS: 2.11.14) • Inform respondent on the intended uses and access limitations (ACS: 5.2.1)

Strategic objective	Strategic output	Activity	Guidelines
			<p>Administrative data: Process</p> <p>5. Establish a process for data editing (ACS: 2.11.6)</p> <p>Survey data: Process</p> <p>5. Establish a process for data processing (ACS: 2.11.6) Monitor and revise data processing (ACS: 2.11.14)</p> <hr/> <p>Administrative and survey data: Analysis</p> <p>6. Establish a process for data analysis, and produce (ACS: 2.11.7)</p> <ul style="list-style-type: none"> • tabulation reports of key findings • analytical reports, e.g. thematic, sectoral and cross sectoral analysis • establish a research component in the statistics authority • Improve the design of statistical products <hr/> <p>Administrative and survey data: Dissemination</p> <p>7. Establish a process for dissemination of statistics through various channels (ACS: 2.11.8)</p> <ul style="list-style-type: none"> • Develop a data dissemination strategy and plan (SHaSA: 4.2.1) • Develop policy document on statistical dissemination principles and practices, including access to microdata, corrections to publications, revisions, confidentiality (ACS: 4.1.1; 4.5.1; 4.5.2; 4.5.3; 4.5.4; 4.5.5; 4.5.6; 5.1.3) • Compile statistical release/report • Package data in different formats for different groups of users (ACS: 4.3.2) • Publish release dates and times; divergence of dissemination schedule; and preliminary results ACS: 2.7.1; 2.7.2; 2.7.3; 4.4.3; • Release data through various channels (e.g. print, electronic, social media) • Provide technical support to users • Compile information package to inform users on methodology etc

Strategic objective	Strategic output	Activity	Guidelines
			<p>(ACS: 4.3.5)</p> <ul style="list-style-type: none"> • Provide custom-designed analysis and products (4.3.3) • put in place process for revisions (ACS: 2.11.15) <p>Administrative and survey data: Archive</p> <p>8. Establish a process for archiving of administrative datasets, survey instruments, metadata, results and statistical information (ACS: 2.11.9)</p> <p>Administrative and survey data: Evaluation</p> <p>9. Establish a process for evaluation of the statistical process (administrative data and survey data) including results (ACS: 2.11.10)</p>
Strategic outcome: Increased supply of statistical information			
Certify statistics for quality	Statistics designated as <i>official</i>	Assess statistics for designation as <i>official</i>	<ol style="list-style-type: none"> 1. Develop/adopt/adapt a statistical quality assessment framework 2. Develop a tool to assess the quality of existing and potential statistical sources (ACS: 2.3.2) 3. Establish a statistical quality assessment procedure or protocol for designating statistics as official and for periodically reviewing the quality of statistics already with official status (ACS: 6.1.6; 6.1.7)
Improve access to statistics	Management System for Statistical Information (MSSI)	Implement a MSSI	<ol style="list-style-type: none"> 1. Establish a process for user access to archived data and/or statistics 2. Define a mechanism and protocol for movement of data among state agencies
Improve timeliness of statistical products	Timely statistical information	Reduce turnaround time for survey and administrative data	<ol style="list-style-type: none"> 1. Identify areas to increase efficiency in the statistical production process that impacts on the timely release of statistical information

3.4.5 Phase 2: Step 7 – Section 5: Funding the strategy

The main strategic outcome of the budgeting process is a budget that will enable implementation of the NSDS. Because implementing the strategy is likely to incur a heavy investment cost, it is important for the budgeting process to be undertaken systematically. Structurally the budget should indicate

- the cost of current programmes;
- the added cost resulting from implementation of the NSDS; and
- the total budget over the medium term.

The budget should be aligned with the staggered process of implementing the NSS, which should spell out which organs of state get to be brought into the system when.

Table 8e: Strategy for Step 7, Section 5 - elaborating an action plan for costing and funding the NSDS

Strategic objective	Strategic output	Activity	Guidelines
Strategic outcome: An enabling budget (SHaSA: 3.1.7) & (ACS: 2.2.1; 3.2.1)			
Costing the NSDS	Budget for the NSDS	<p>Cost current business (current budget) (ACS: 3.3.1)</p> <p>Estimate additional costs required</p> <p>Source funding</p>	<ol style="list-style-type: none"> 1. Identify statistical programmes and priorities for funding (what should be funded) based on strategic and operational plans (ACS: 3.3.2) 2. Cost current activities at level of organ of state (what is already funded) 3. Assemble current budgets for statistical activities throughout all the organs of state 4. Estimate the additional cost of undertaking the NSDS at the levels of <ul style="list-style-type: none"> • coordination activities • systems of statistical production in organs of state 5. Combine the current budget and the additional cost of the NSDS (total ask) 6. Undertake a cost-effective analysis of major activities (ACS: 3.3.3) 7. Review proposed budget 8. Draw up a medium term budget for the NSDS (ACS: 3.2.2) 9. Source funding

4 Phase 3: Implementation

Once the design phase of the NSDS has been completed, the next phase is about implementing the strategy. Successful implementation of the strategy will vindicate the resources and effort spent on developing the strategy; otherwise the whole exercise will have been a waste of time and resources. The implementation process consists of three basic mechanisms for:

- managing change;
- monitoring progress and reporting on input, outputs and outcomes; and
- evaluating the way things have been or have not been done.

Table 9: Strategy for Step 8 – Implementation of the NSDS

Strategic objective	Strategic output	Activity	Guidelines
Strategic outcome: Strategy implementation and management (SHaSA: 3.1.6)			
Planning	NSDS and planning documents	Publish planning document (ACS: 6.1.3)	<ol style="list-style-type: none"> 1. Compile the NSDS (ACS: 6.1.9; 6.1.11) 2. Compile sectoral statistical plans 3. Compile statistical work programmes for organs of state
Managing change	Motivated work force	Develop a comprehensive change management programme	<ol style="list-style-type: none"> 4. Change management programme should focus on: <ul style="list-style-type: none"> • Policy makers and programme managers in the public service • Stakeholders • Organs of state (statistics units) • Statistics Authority (NSO)
Monitoring and reporting on inputs, outputs and outcomes	Quarterly and annual reports	Develop a monitoring and reporting system and mechanism (ACS: 3.3.9; 6.1.3)	<ol style="list-style-type: none"> 1. Establish a quarterly and annual reporting process 2. Compile quarterly report. Report on: <ul style="list-style-type: none"> • Organs of state report quarterly against targets in the strategic plan and work programme 3. Compile an annual report <ul style="list-style-type: none"> • Combined NSS performance report • Financial performance report on NSS activities 4. Establish national mechanism to coordinate and monitor aid-assistance (ACS: 6.2.3)
Evaluation	Evaluation reports	Develop an evaluation system and mechanism	<ol style="list-style-type: none"> 1. Establish an evaluation programme for the NSS <ul style="list-style-type: none"> • Diagnostic evaluation (preparatory research) • Design evaluation(theory of change) • Implementation evaluation

Strategic objective	Strategic output	Activity	Guidelines
			<p>(operational mechanisms)</p> <ul style="list-style-type: none"> • Impact evaluation (measure changes in outcomes) • Economic evaluation (value for money) (ACS: 2.3.5) • Evaluation synthesis (cross sectoral) <p>2. Participate in peer reviews (SHaSA: 3.1.8)</p>