# Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Africa Region
*Addis Ababa, Ethiopia, 14-18 October 2019*

## Implementation of a South African national quality assurance framework throughout the NSS

### Improving statistical processes throughout the NSS

Portia Molalakgotla-South Africa
16 October 2019

2030
NDP

# Contents

- Background

- Definition

- Phases of engagement

- Outputs of technical support

- Country example

# Background - The objective of a functioning SANSS is to address the

**Information gap**

**Quality gap**

**Capacity**

*SASQAF - Improvement of Quality through technical support*

# SASQAF

To address the quality gap you need to **measure** and **improve** the existing level of quality

## Quality statistics

Quality is generally accepted as 'fitness for purpose' and this implies an assessment of an output with specific reference to its intended objectives.

## Official statistics' definition is statutory – see Statistics Act [No. 6 of 1999]

Official statistics are statistics designated as official statistics by the Statistician-General within the provisions of the Statistics Act

## National statistics'

National statistics are statistics not designated as official Statistics by the Statistician-General

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

NDP 2030

SASQAF codifies quality (9 dimensions), is a two-fold functioning tool for quality.

- Guide in assurance of quality and improvement of processes
- evaluate the quality of statistics produced by organs of state

*Organs of state are advised to use SASQAF as a tool to assure and improve the quality of their statistical production system*

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

NDP
2030

## Credible information on indicators will be obtained through SASQAF

*Indicators (idct) Standards (std)*



Integrity (6 idct 6 std)

Accessibility (12 idct 13 std)

Accuracy (7 idct 36 std)

Timeliness (4 idct 10 std)

Relevance (5 idct 5 std)

Pre-requisites (8 idct 21 std)

Interpretability (3 idct 3 std)

Comparability & Coherence (5 idct 5 std)

Methodological Soundness (6 idct14 std)

stats sa
Department:
Statistics South Africa
REPUBLIC OF SOUTH AFRICA

NDP 2030

# SASQAF identifies  9  dimensions of quality

Each dimension has associated quality indicators, standards and benchmarks.

## Chapter 1: Prerequisites of quality

### 1.1    Description

The prerequisites of quality refer to the institutional and organisational conditions that have an impact on data quality. It defines the minimum set of necessary conditions that have to be met in order to produce good quality statistics. It therefore serves as the foundation on which all other dimensions of data quality should be premised on.

### 1.2    Key components

- Legal and institutional environment (including Memoranda of Understanding (MoUs) or Service Level Agreements (SLAs)
- Privacy and confidentiality
- Commensurability of resources
- Quality as the cornerstone of statistical work

### 1.3    Quality indicators, standards and benchmarks

| Indicator | Standards | Assessment Levels | | | |
| --- | --- | --- | --- | --- | --- |
| | | Quality Statistics Level 4 | Acceptable Statistics Level 3 | Questionable Statistics Level 2 | Poor Statistics Level 1 |
| 1.1  The responsibility for producing statistics is clearly specified. | 1.1.1   A legal arrangement exists that explicitly mandates the production of statistics. | A law or legal arrangement exists that explicitly provides the mandate for the production of statistics. | A law or legal arrangement exists that implies that statistical production is part of its mandate. | No law or legal arrangement exists, but an informal agreement exists for statistical production. | No arrangement exists. |

stats sa
Department:
Statistics South Africa
REPUBLIC OF SOUTH AFRICA

NDP 2030
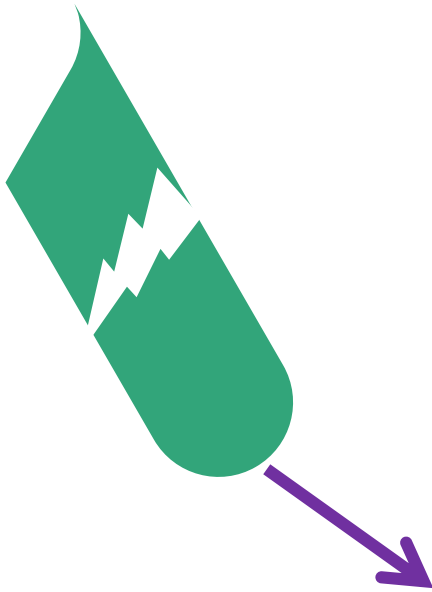
**Data quality is measured and improved across all 9 basic steps of the GSBPM (Statistical value Chain)**

**Hence quality requirements are build upon the GSBPM**

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

# Quality Management & Metadata Management

| 1 Need | 2 Design | 3 Build | 4 Collect | 5 Process | 6 Analyze | 7 Disseminate | 8 Archive | 9 Evaluate |
|---|---|---|---|---|---|---|---|---|
| 1.1 Determine need for information | 2.1 Outputs | 3.1 Data collection instrument | 4.1 Set up collection | 5.1 Standardize | 6.1 Acquire ancillary information | 7.1 Update output systems | 8.1 Manage archive repository | 9.1 Gather inputs for audit |
| 1.2 Consult & confirm information requirements | 2.2 Frame and sample methodology | 3.2 Process components | 4.2 Run collection | 5.1 Classify and code | 6.2 Calculate aggregates | 7.2 Produce products | 8.2 Preserve data and associated metadata | 9.2 Prepare audit report |
| 1.3 Establish output objectives | 2.3 Tabulation Plan / Variables | 3.3 Configure workflows | | 5.2 Load data into processing environment | 6.3 Prepare draft outputs | 7.3 Produce "Quality Statement." | 8.3 Dispose of data and associated metadata | 9.3 Quality plan |
| 1.4 Check data availability | 2.4 Data collection | 3.4 Test end-to-end | | 5.3 Integrate data | 6.4 Validate | 7.4 Manage release of products | | |
| 1.5 Prepare business case | 2.5 Statistical processing methodology | 3.5 Finalise production systems | | 5.4 Edit and impute | 6.5 Describe and explain | 7.5 Market and promote products | | |
| | 2.6 Define archive rules | 3.6 Draw sample | | 5.5 Derive new variables | 6.6 Disclosure control & Anonymise | 7.6 Manage customer queries | | |
| | 2.7 Processing systems and workflow | | | 5.6 Calculate weights | 6.7 Finalize outputs for dissemination | | | |
| | 2.8 Detailed project plan | | | | | | | |

# SANSS Phases Of Engagement

6. SASQAF Independent Assessment

5. SASQAF Self Assessment

4. Implement Solution

3. Problem Solution (Strategy & Plan)

2. Diagnostic Assessment

1. Problem Identification

*Data quality Accreditation by Independent Assessment Unit*

*Quality improvement of processes through technical support*
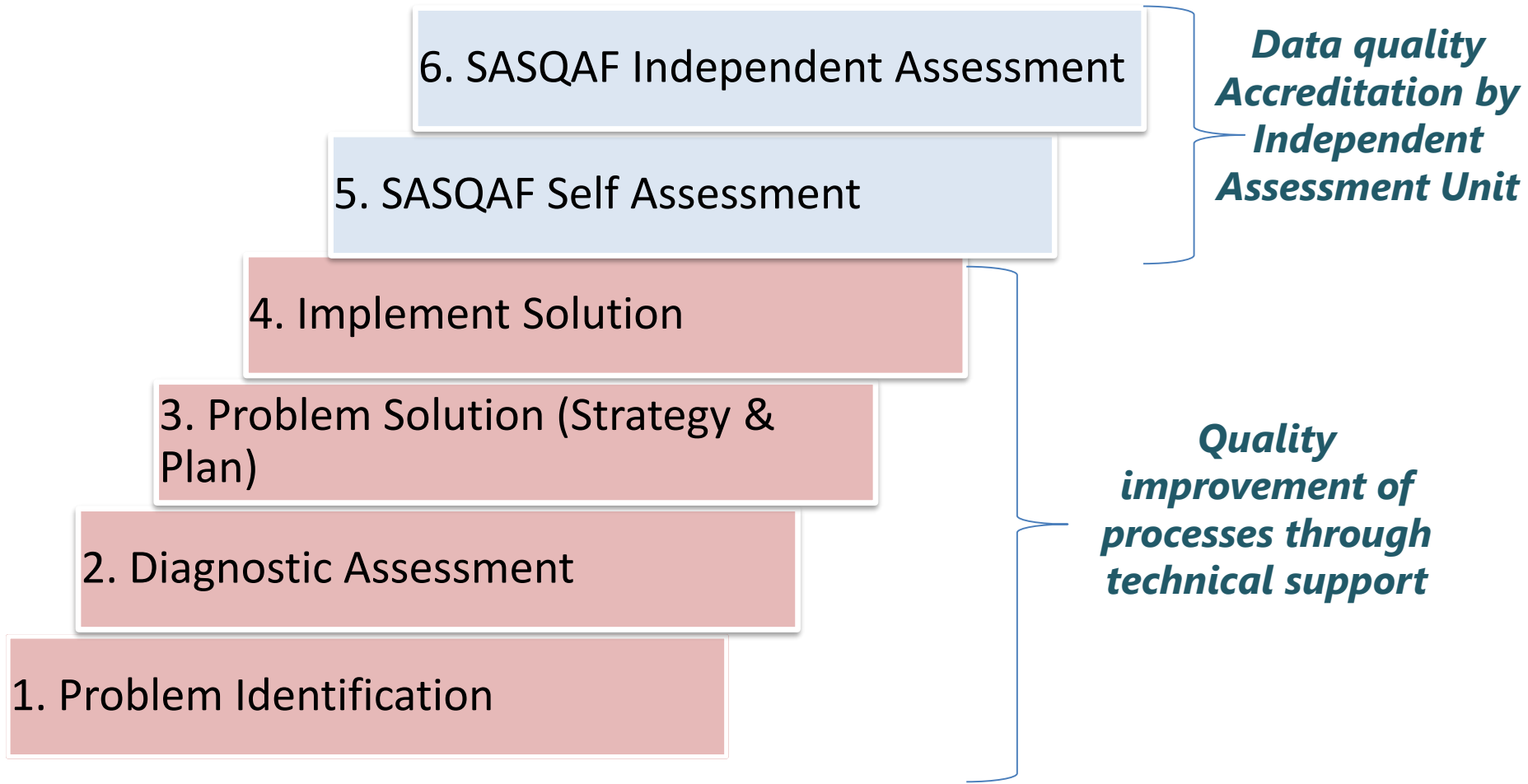
stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

# Example of completed mapping template

Department of Justice and Constitutional development

| Phases (SVC) | Sub-processes | Quality dimension | Quality indicators | Standard and findings | Stats SA recommendations |
|---|---|---|---|---|---|
| Need | Determine need for information | 1.Prerequisites of quality | 1.1 The responsibility for producing statistics is clearly specified. | 1.1.1 A legal arrangement exists that explicitly mandates the production of statistics<br>✓ **Older Persons Act 13 of 2006**<br>✓ **Children's Act 38 0f 2005**<br>✓ **Child Justice Act 75 of 2008** | Acceptable, the legislation available is adequate for the department to gather and produce court/criminal statistics in the country. |
| Design | Design outputs (questionnaire) | 8.Methodological soundness | 8.1 Concepts, definitions, and classifications used follow accepted standard, guidelines or good practice (national, international, peer agreed) | 8.1.1 The concepts and definitions must satisfy accepted standards, guidelines or good practice in line with national, international and peer agreed norms and must be documented | Develop Concepts and Definitions (C&D) manual for all statistical programs of the department. This will go a long way in ensuring that all definition and concepts in use are standardised. |

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

NDP 2030

# Types of Technical Support

- SASQAF Training

- Diagnostic process (Walk in session)

- Capacity building on related GSPBM processes  (electronic devices)

- Identification of data gaps if any

- Recommendations on improvement required

- Development of implementation strategy

- Support during implementation (setup the team of experts – e.g IT experts)

- Etc.,

# Outputs of Technical Support

Mapping report

Diagnostic report

Implementation plan

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

NDP 2030

# Country example

**Diagnostic Assessments of Police Stations in NW/NC/LP**

**Study Tours to Mexico/US/UK**

**Draft policy**

**2012**

**MoU signed**

**Development of the committees**

**2015**

**Policy approved**

**Self assessment**

**2017**

**2011**

**Establishment of the task team**

**2013**

**Review of Crime Counting Rules and Margin of error**

**2014/15 2015/16**

**SG's remarks to the Crime publications**

**+ 2018**

**Independent assessment of Crime Stats**

**ICCS implementation**

stats sa
Department:
Statistics South Africa
**REPUBLIC OF SOUTH AFRICA**

NDP 2030

# Thank you