

Appendix A: Study Terms of Reference

TERMS OF REFERENCE

TERMS OF REFERENCE FOR THE REVIEW OF THE SOUTH AFRICAN STANDARDS, QUALITY ASSURANCE, ACCREDITATION AND METROLOGY (SQAM) INFRASTRUCTURE

1. BACKGROUND

The SQAM institutional & organisational infrastructure consists of four groups:

- Group one consists of consumers of products and services provided by commerce and industry.
- Group two consists of firms of different sizes including SMME's who compete on the local and global market with their products and services.
- Group three is made up of regulatory and non-regulatory, conformity assessment service providers such as certifiers, test and calibration laboratories, quality practitioners and legally mandated inspection bodies, such as the Trade Metrology department of the South African Bureau of Standards.
- Group four contains the official institutions of the South African SQAM infrastructure namely the Government, the National Metrology Laboratory (NML), the South African Bureau of Standards (SA-BS), the South African National Accreditation System (SANAS), the South African Quality Institute (SAQI), the South African Excellence Foundation (SAEF) and similar bodies.

It is an internationally recognised fact that economic success depends upon a sound and efficient standards and conformity assessment infrastructure. A nation's ability to develop technical norms and to confidently and competently evaluate products against such norms is, therefore, of the utmost importance.

For example, adopting international standards to penetrate foreign markets, issuing test reports and certificates that are accepted world-wide and putting in place mutual recognition agreements (MRA's) etc. are all vital to export-led growth. Examples of MRA's include those between governments i.r.o. technical product regulations, multilateral agreements between

national accreditation bodies and mutual agreements between national metrology institutes at BIPM level.

2. OBJECTIVES

The main overall objective of the review is to improve and enhance the competitiveness of South Africa's suppliers of products and services by ensuring that the technical SQAM infrastructure operates at optimum efficiency.

The technical objectives of the review are, therefore, primarily to:

- Evaluate the South African SQAM infrastructure with a view to identifying shortcomings and recommending improvements to meet the needs of SA commerce, industry and government. The study relates only to products and services. Other areas such as environmental safety, eco-labelling, general health issues and non-product related legislation are not covered. These may, however, be covered in a follow-up study.
- Establish what financial, effectiveness and efficiency constraints, if any, hamper the development of the SQAM infrastructure.
- Level the playing field by removing obstacles to competition where appropriate.

The results will be used to advise Business, Labour and Government on the formulation of a holistic national SQAM policy and the relevant roles of the above mentioned groups in implementing this policy. In the process the effects of such policies elsewhere in the world should be taken into consideration.

In principle the four groups require the following from the SQAM infrastructure:

Group 1:

- Health protection, for example healthy processed food products and beverages;
- safety, for example safe motor vehicle components or electrical household appliances;
- quality products and services at competitive prices and on-time delivery, and
- goods that have been measured by means of accurate trade instruments and within acceptable tolerances.

Group 2:

- A sufficient number of product and service standards to support industry and technology transfer, simplify manufacturing processes and reduce production costs, backed by adequate and internationally equivalent national measuring standards;
- utilisation of strategic SQAM resources to create commercial activities;
- competent and competitively priced conformity assessment suppliers;
- the removal of technical barriers to trade to obtain access to foreign markets and integrated government support services (eg. Information on standards and regulations in foreign markets) to penetrate such markets and promote exports, and
- Fair competition in respect of weights and measures in the market place.

Group 3:

- An open and competitive level playing field;
- A regulatory system which is accountable to the State and enforces compliance;
- an affordable, value-added accreditation system that is internationally recognised, and
- a national source of internationally recognised measurement traceability.

Group 4:

- Participation in international fora to influence international developments and to strengthen the recognition and basis of South Africa's quality infrastructure (eg. ISO, BIPM, ILAC, IAF, OIML);
- a policy framework that defines the responsibilities of each member of the group and how members interact synergistically to coordinate their activities to further industrial development and promote indigenous technology;
- a transparent and suitable level of government funding and interaction to carry out state-mandated activities;

- accuracy and international equivalence of measurement and measurement standards demanded by industry and consumers;
- a transparent mechanism (i.e. accreditation) to verify the competence of conformity assessment in South Africa;
- Strategic direction setting by Government, and
- legislation to regulate the SQAM infrastructure where needed.

3. SYSTEMS TO BE EVALUATED

From the above mentioned requirements one can identify eight sub-systems of the SQAM infrastructure that need to be evaluated to a greater or lesser extent. These are: Government & International Liaison, standardisation, accreditation, conformity assessment, metrology, legal metrology, funding, legal system and promotion of quality.

The following specific issues need to be addressed:

3.1 Compare the SQAM system of formulating and coordinating technical regulations to that used within SA's main trading partners as well as comparable economies and make recommendations i.r.o. institutional & organisational arrangements.

3.2 Compare the SQAM system of formulating and coordinating medium to long term strategic policy of its SQAM institutions to SA's main trade partners as well as comparable economies and make recommendations i.r.o. the setting up of a suitable advisory forum with stakeholders.

3.3 Compare the SQAM system of product and service standardisation to that of SA's main trading partners as well as comparable economies. Pay particular attention to the level and tempo of adoption of international or regional standards.

3.4 Investigate the separation/ privatisation of commercial activities from standards development and publication within relevant foreign standards bodies.

3.5 Report on how accreditation supports regional and international trade agreements among SA's main trading partners as well as comparable economies.

3.6 Investigate how other countries compile and maintain a central published register of accredited conformity assessment bodies, certified or registered companies as well as certified products.

3.7 Compare the relationship between the NML and SA industry with the situation prevalent among SA's main trading partners as well as comparable economies and compare this to the situation in South Africa.

3.8 Investigate the positioning and legal identity of NML's and accreditation bodies in SA's main trading partners as well as comparable economies and compare this to the situation in South Africa

3.9 Compare the South African Trade Metrology system to that of SA's main trading partners as well as comparable economies with a particular emphasis on how these countries achieve confidence in trade measurement.

3.10 Benchmark the current level and scope of SA government SQAM funding against the levels in comparable economies. Investigate what econometric models are available to evaluate the impact of such spending on economies.

3.11 Investigate how foreign governments support the promotion of quality of product, quality of service and quality of Organisation?

3.12 Determine with which countries South Africa should conclude mutual recognition agreements in the regulatory sphere. Compile a list of main technical barriers to SA trade in the EU, USA, Canada, Australia, Japan, Malaysia, People's Republic of China South Korea.

3.13 Evaluate whether the SQAM system of product and service standardisation in SA meets industry's requirements and how many international standards must be adopted to serve the needs of industry.

3.14 Conduct a cost-benefit analysis of hiving off the commercially viable activities of the SABS into a separate entity and suggest a suitable process bearing in mind that certain SABS facilities serve a strategic national interest.

3.15 Evaluate and report on the costs/benefits, necessity and/or feasibility of opening up the system of compulsory specifications to accredited Include a cost benefit analysis of drafting product liability to provide for legal action against firms that transgress technical regulations. Determine the most effective way of enforcing technical government regulations (eg. withdrawal of tender preferences for SMME's as punishment for non-compliance etc.).

3.16 Conduct a cost-benefit analysis of implementing a compulsory South African regulatory mark for compulsory specifications as well as a comprehensive product labelling system.

3.17 Investigate and recommend how the Standards Act should be amended to bring it up to date with specific reference to the role of SANAS and certification/registration bodies, the relevance of outdated sections and the requirements of the Constitution.

3.18 Conduct a cost-benefit analysis of SQAM institutions ' participation' and maintenance of membership and agreements with international fora and cooperations such as ISO/IEC, SIPM, ILAC, IAF, OIML, TBT panel of the WTO etc.

3.19 Investigate and recommend what fields of accreditation ought to be covered by SANAS and what should be its long term role in regulatory accreditation, eg. inspection authorities.

3.20 Investigate the feasibility of ' drafting an accreditation act (i.e. encompassing all elements of conformity assessment) and how to legislate and control unethical trade practices in the conformity assessment field.

3.21 Investigate and report on the setting up of a central published register of accredited bodies, certified or registered companies and certified products with a view to determining the level of certification and registration.

3.22 Investigate ways in which Government can encourage and support the use of standards and the improvement of quality in South Africa.

3.23 Determine how the NML serves the measurement traceability needs of the SQAM infrastructure and how it and the SABS contribute in providing calibration and testing infrastructure.

3.24 Investigate and recommend the best long-term institutional arrangement and positioning for the NML and SABS.

3.25 Evaluate and report on the medium to long term role of the South African Quality Institute, the South African Excellence Foundation and similar bodies such as SASQ, ALQS etc.

GLOSSARY OF ACRONYMS

BIPM	International Bureau of Weights and Measures
FRIDGE	Fund for Research into Growth and Equity
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Co-operation
ISO	International Organisation for Standardisation
MRA	Mutual recognition agreement
NML	National Metrology Laboratory
OIML	International Organisation for Legal Metrology
SABS	South African Bureau of Standards
SAEF	South African Excellence Foundation
SANAS	South African National Accreditation System
SAQI	South African Quality Institute
SQAM	Standards, quality assurance, accreditation & metrology
TBT	Technical barriers to trade
WTO	World Trade Organisation

