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## 4 Overall findings

In the context of the above factors the Review has produced a series of findings which, in the opinion of the Review Team, provides reassurance about the fundamental strengths of many of the elements of South Africa's SQAM. This a testament to the past commitment of the South African Government to resource its infrastructure. However, the findings also highlight areas where the infrastructure needs fundamental re-engineering and more focussed targeting of national interest activities and associated funding.

In parallel with issues directly involving the SQAM institutions, the Review confirmed the following:

- A critical need for establishment of a national focus for review and reform of technical regulations.
- A need for establishment of Government strategies for negotiation of cost-effective MRAs in regulated sectors.
- A need for promulgation of a national strategy to promote development of quality products and services in South Africa.

The Review's recommendations fall into a number of clusters broadly covered under the headings of:

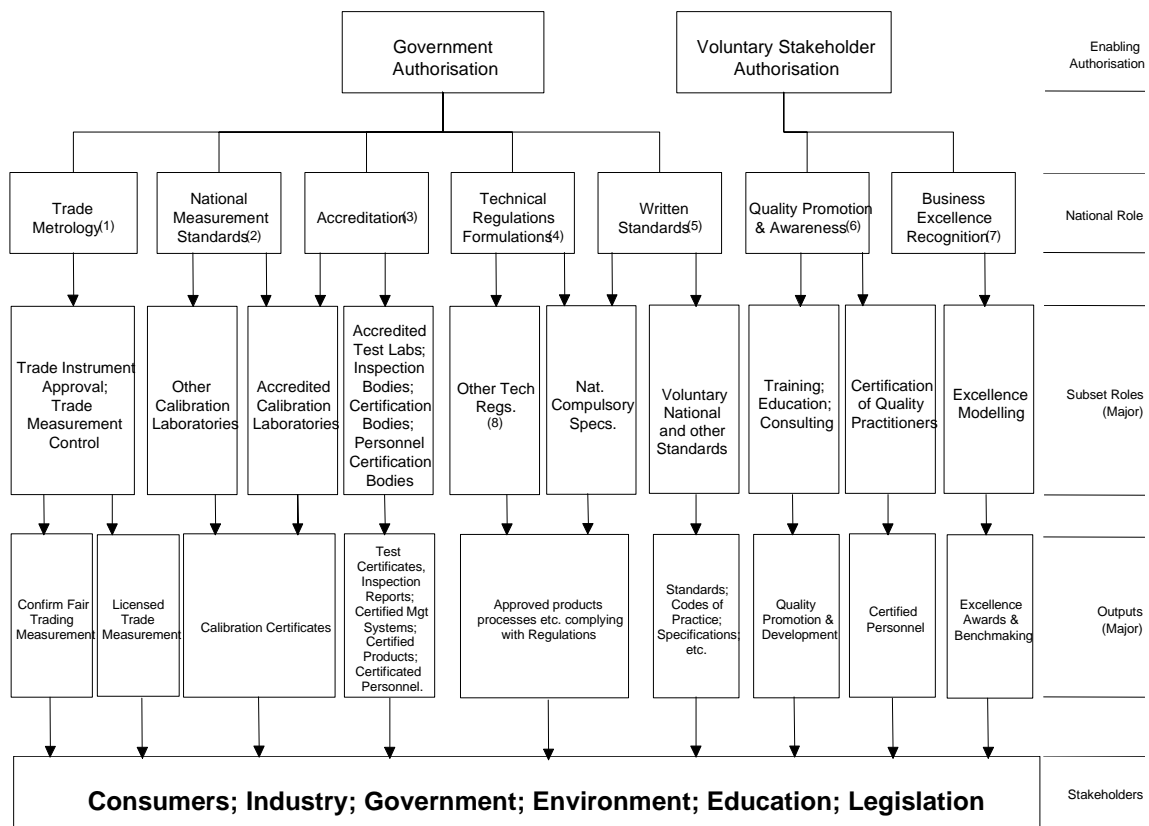
- Positioning of SQAM institutions and related bodies for national interest roles (including regulatory bodies).
- Coordination and governance of SQAM institutions.
- International profiles of SQAM institutions.
- Separation of commercial activities and fair competition principles in the SQAM environment.
- Funding of SQAM institutions.
- SQAM relations with industry.
- SQAM support for South Africa's international trade.
- General SQAM issues and services.

The optimum sequences and actions needed to implement the recommendations of the Review are summarised in *The Way Forward* section at the conclusion of this *Executive Summary*.

## 5 Overview of the South African SQAM Infrastructure

The SQAM Infrastructure in South Africa can be regarded as consisting of seven elements. These are depicted in the diagram below:

**The South African SQAM landscape (December 2000)**



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These elements are described briefly below:

- **Physical Metrology (National Measurement Standards):** The purpose of this element of the infrastructure is to establish, maintain and disseminate physical standards of measurement, which are traceable to international standards. Any legally required measurement must be traceable to a National Measurement Standard. Industry and commerce also require access to measurement standards of known accuracy and international equivalence.
- **Standards Development:** This element of the SQAM infrastructure addresses development of documentary codes of practice, methods of test, specifications and guidelines across the broad spectrum of industry, commerce and government for products, services and systems.
- **Conformity Assessment:** This is the process of determining whether a product, service, system or individual meets a set of requirements, such as a standard, specification or code of practice. It includes the activities of testing, inspecting and certifying that the characteristics of products, services, management systems and personnel meet defined requirements. There are normally multiple providers of conformity assessment services in an economy.
- **Legal and Trade Metrology:** The system is aimed at approving designs of equipment (pattern approval) and monitoring such equipment used in trade, to ensure fair weights and measures are used in day to day commerce.
- **Accreditation:** Accreditation is the determination of competence aimed at ensuring that laboratories and other providers of conformity assessment services are able to produce reliable test data and valid attestations of conformity of products, services, systems and personnel with specified requirements.
- **Quality Awareness, Development, Promotion and Training:** Within an overall SQAM infrastructure the promotion of quality of products, services and systems is a combination of culture and awareness development activities intended to improve organisational performance. Typically there are various service providers in an economy developing quality awareness, and consulting and training enterprises on quality issues and techniques. Governments often provide incentives for adoption of quality initiatives.
- **Business Excellence:** Many economies have adopted programs for promoting management excellence as a philosophy to improve business performance. The process takes the concept of “quality” and extends it to a broader concept of “business excellence”. It involves a

self-assessment model used by business and other organisations and the rewarding of excellence through a system of public awards.

- Regulatory Regime:** In a SQAM context the regulatory regime consists of all legislation that refers to technical regulations, the parties responsible for demonstrating compliance with such regulations and the processes for monitoring and enforcing compliance. Most of the major SQAM institutions have actual or potential interaction with an economy's regulatory regime through drafting of standards, determining compliant measurement equipment, by assessing conformity with requirements or accrediting competence of the various role players.

It is acknowledged that most of the South African SQAM systems have extensive international linkages in order to ensure the credibility and international recognition of their systems. This is critical for facilitation of South Africa's international trade and the competitiveness of domestic business. These international links are depicted in the following figure.

### International and regional linkages

