

8 The role of Government

8.1 Overview of the roles that governments play

8.1.1 The South African situation

a) The role of the DTI

The Standards and Environment Directorate within the DTI is the South African Government Department primarily responsible for SQAM. This Department regularly formulates strategic policy with regard to the SQAM institutions. Key features of the current involvement are:

- The DTI was instrumental in the creation of SANAS as South Africa's national accreditation body. The DTI evaluates and approves the annual SANAS business plan and budget. The strategic policy of SANAS is set out in the MOA between the DTI and SANAS.
- The SABS reporting line to Government is through the DTI. The Minister of Trade and Industry appoints the SABS Council, and evaluates and approves (with the Minister of Finance) the SABS business plan. The SABS policy and strategy is largely driven by the Standards Act and the SABS Council.
- The DTI evaluates the annual NML business plan, and meets with NML officials on a quarterly basis to discuss strategic direction. The NML strategic direction is set out in the MOA between the DTI and the NML, as well as the Measuring Units and National Measurements Act.
- The Government is currently investigating quality activities in the country, with a view to developing a formal policy for quality promotion. The Government supports both SAQI and SAEF financially (either directly or indirectly), but its long-term commitment to funding of such organisations is uncertain.

The system of policy formulation also allows SQAM institutions to bring strategic issues to the DTI, which studies them, and may formulate and propose changes to current policy.

The focus of the DTI at the moment is very much on an institution to institution basis, although it has been recognised that the DTI informally makes a major contribution to provide co-ordination between SQAM institutions. At present the lack of a formal mechanism, with broad stakeholder representation, to coordinate and formulate long term strategies and policies for the "whole of

SQAM” makes it difficult for the DTI to provide leadership in this regard. This is regarded to be a shortcoming.

It is further noted that the name of the Standards and Environment Directorate does not adequately reflect its responsibilities, as they are broader than just standards.

The overall objective of the DTI with respect to SQAM is to “increase competitiveness and exports of South African firms by providing effective SQAM infrastructure”. This objective is translated into specific programmes ranging from the establishment of a national holistic SQAM policy, to harmonisation in the SADC region. The current programs, relevant to SQAM are as follows:

- Formulation of a national SQAM policy.
- Management of integration of standards and conformance issues into SADC processes.
- Oversee South Africa’s involvement in recognition of compliance with the OECD Principles of Good Laboratory Practice.
- Work towards the signing of a MOU between South Africa and US Food and Drug Administration.
- Integrating industrial policy formulation within the SABS planning.
- Quality infrastructure development programme.
- South African Excellence Model for SMMEs.
- Participation in WTO/TBT meetings.
- SQAM marketing campaign to SMMEs.
- Development of an econometric model for SMMEs.

Measurements that would reflect the attainment of specific objectives are not in place. This shortcoming is recognised by the DTI and the need for econometric modelling was considered as part of this review, and reported on elsewhere in this report.

b) The role of the Department of Arts, Culture, Science and Technology (DACST)

The primary interface between DACST and the SQAM institutions is with the SABS, which is designated to be a Science Council, and indirectly the NML through the CSIR, which is also designated to be a Science Council. Line reporting to Government is however through the DTI.

The implication of being classified as a Science Council is that the strategies of the above mentioned organisations should be aligned with the national system of innovation.

It can be argued whether or not the SABS fits the description of a Science Council. It has been noted that the SABS is subject to the same performance measurement criteria (KPA's and KPI's) as other science councils. It is both the opinions of the SABS and the Review Team that such measurements are not directly applicable to the SABS. The status of the SABS as a Science Council, or otherwise, is analysed and recommended on, elsewhere in this report.

8.1.2 The international situation

Governments have various interactions with their SQAM institutions and the level and type of their interactions varied in the countries visited and surveyed. Major areas of interaction are:

- Governments as owners of SQAM institutions.
- Government involvement in the governing bodies and high level policy and strategy setting forums of SQAM institutions.
- Government's formal recognition or otherwise of national roles of SQAM institutions.
- Governments' funding of SQAM institutions
- Governments as users of SQAM services.
- Governments' use of SQAM institutions for trade negotiation and facilitation.
- Governments' use of SQAM institutions for regulatory purposes.
- Governments' promotion of SQAM activities to achieve national policies and goals (eg quality promotion and productivity improvements).
- Governments' specifications of their performance expectations of SQAM institutions.

There were a variety of circumstances where governments consulted directly with their SQAM institutions in negotiating trade agreements. There was, however, a strong trend towards use of SQAM institutions' MRAs and other international networks to underpin government-to-government trade agreements relevant to standards, conformity and technical barriers to trade issues.

Many governments specify use of their SQAM institutions for regulatory purposes. This includes use of non-government SQAM organisations, such as accreditation bodies and standards writers. These arrangements have been successfully operated without enabling Acts or Regulations covering the institutions' activities. The SABS's situation of the standards writer also having a statutory regulatory function was unusual.

Governments' direct involvement in promotion of SQAM activities varied from country to country. For issues such as quality promotion, the review found that governments were more active in Malaysia and Brazil, for example, than in the UK or Australia, where past activities of support have decreased or terminated. The cycle of quality promotion usually involves government support during the initial establishment phases, and this is then gradually reduced as the private sector takes over quality promotion and support activities on a commercial basis, with a quality culture having been established in the countries' economic delivery organisations.

Government specifications of expectations from their SQAM institutions varied from broad "national interest" support for government's policies through to tightly defined goals with clear performance measures, normally tied to funding priorities.

8.2 Governments' recognition of, and involvement in the governance of SQAM institutions

8.2.1 The South African situation

Government recognition of SQAM institutions is either defined in the various Acts relevant to the individual SQAM institutions, and/or in the Memoranda Of Agreement (MOAs) between the Government and specific institutions. In South Africa these are:

- MOAs between DTI and the NML, SAQI, and SANAS.
- The Standards Act, Act 29 of 1993.
- Measuring Units and National Measuring Standards Act, Act 76 of 1973.

- Building Regulations and Building Standards Act, Act 103 of 1977.

Although many government departments are directly involved in various SQAM activities, for example, involvement in technical committees, the Department of Trade and Industry (DTI), through its Standards and Environment Directorate, is the official Government body that deals with SQAM on behalf of the Government.

In summary, Governments' direct involvement either through management representation, formal agreements, or enabling legislation is shown in the following table.

Table 6: Government involvement in SQAM institutions

Activity	Organisation	Government involvement
National measurement standards	NML	Measuring Units and National Measuring Standards Act No Government representation on the M&MTEK Management structures, but DTI on CSIR Board MOA between the CSIR and DTI
Accreditation	SANAS	MOU between SANAS and the DTI No direct Government representation on the SANAS governing structures
Documentary standards	The SABS	Standards Act No direct Government representation on the SABS Council Minister of Trade and Industry appoints the SABS Council
Technical regulations	Various	Consultations are carried out with all relevant interested parties.
Quality promotion	SAQI	No Government representation on the SAQI Board Standing invitation to the DTI to become Board member
Business Excellence	SAEF	No Government representation on the SAEF Board Standing invitation to the DTI to become Board member

8.2.2 International situation and practices

The survey found a variety of circumstances in terms of government ownership of SQAM institutions. Most countries have government ownership of at least some of their SQAM institutions and particularly of legal metrology and national measurement institute functions. Of the countries visited and surveyed, standards bodies, and accreditation bodies were, in the main, outside government, although some have a quasi-government status. Similarly, quality promotion and business excellence organisations are generally not in government, although some governments are directly involved in similar activities.

The level of government representation in the Boards, Councils or other governing bodies of SQAM institutions also varied considerably. Where government provides substantial funding to SQAM institutions, this investment is normally reflected in some high level representation by government in the institution's governing body or alternatively government has power to nominate representatives to such bodies.

SQAM institutions obtain government recognition through a variety of means: direct government ownership through Acts, Regulations or Decrees authorising their roles; through Memoranda of Understanding (MOUs); through contracts with individual institutions; or through informal mechanisms, such as specification of their use for government purchasing, regulatory requirements etc. In some economies, such as Brazil, there are highly centralised arrangements for government operated SQAM activities. In other countries national SQAM functions are performed by separate institutions outside government, or in a combination of government and non-government organisations. Some of the Memoranda of Understanding between SQAM institutions and government are "whole of government" MOUs, while others only cover the roles of the institution relevant to a single government department or ministry. This is also an important consideration for South Africa, and especially SANAS as dealt with elsewhere in this report.

8.2.3 Conclusions

Although it is recognised that there is formal and informal interaction between the South African government and SQAM institutions, the lack of formal government representation (as a stakeholder and provider of funds) on the governing bodies of SQAM institutions is of concern. In some cases, for example SAQI and the SABS, it is by choice that Government is not formally represented. In other instances no provision was made for Government representation. An

earlier recommendation addresses the need for increased Government representation on the governing bodies of SQAM institutions.

It is also recognised that much of the co-ordination and interaction between Government and SQAM institutions is on an informal basis. This depends heavily on individual relationships, the knowledge of individuals of SQAM activities, and could deteriorate if specific individuals leave their positions. An earlier recommendation addresses the need for the establishment of a SQAM coordinating forum.

With respect to formal recognition of South African SQAM institutions through enabling Acts or MOAs, the current South African situation is considered appropriate, except in the case of SANAS who does not have whole of “government recognition” in its MOA, as is discussed extensively elsewhere in this report.

The Standards and Environment Directorate of the DTI remains the primary Government Department that deals with SQAM, and the size of the department will need to be increased to meet increased duties and obligations, particularly if the key recommendations from this review are implemented. In light of the increased involvement of this Directorate in government-to-government MRA negotiations, and other administrative and liaison responsibilities relevant to SQAM, technical regulations, etc. it is envisaged that the resourcing of the Department will have to be increased. In the UK for example, the Standards and Technical Regulations Department in their DTI employs 37 people, most of whom are involved in oversight and co-ordination of technical regulations, and have five staff involved in oversight and funding administration of the UK SQAM infrastructure.

8.3 Government funding of SQAM institutions

8.3.1 The South African situation

The funding of the various SQAM institutions is dealt with extensively in the individual assessment of the various SQAM institutions. In general it is concluded that the South African Government is playing a constructive role in the funding of the various institutions.

Funding of SQAM institutions and activities is a highly contentious issue, with many divergent views on the levels of funding, the security of funding and the accountability of spending.

The first observation is that Government has, over the years, invested significant amounts of money in SQAM development. The general soundness of the existing SQAM infrastructure is testimony that these funds have been utilised to the advantage of the country.

The second observation is that there is continual unease amongst all stakeholders regarding:

- The activities being funded. In most instances the rationale for government support for specific activities is sound, but there are exceptions, for example the development of a business excellence model for SMMEs by SAEF.
- The levels of funding – are the levels too high, or too low? This results in considerable friction between role-players.
- The security of funding streams, which is a concern to all SQAM institutions
- The utilisation of funds – are funds appropriately utilised?

The primary problem is that there is not an adequate management process in place. Although the Government attempts to tie funding to specific activities and outcomes, the process is inadequate in that:

- Funding is tied to generic, high level activities.
- The deliverables are not clearly defined .
- The measurements of achievement against deliverables are not clearly defined.

A more sophisticated system, aimed at ensuring that appropriate levels of funding are determined, secured and managed, is required.

8.3.2 The international situation and practices

The levels of Government funding for SQAM institutions vary considerably between countries and organisations. It is not possible to determine what could be an appropriate level of funding for an economy in a particular phase of development. A comparison between funding levels between South African institutions and their international counterparts is done on an institution basis elsewhere in this report.

The following are internationally considered to be important objectives and features:

- To determine the importance of an activity to the economy (including considering the risk of not having the activity).
- To have mechanisms whereby the appropriate levels of funding are determined.
- To fund the activity to a level necessary to ensure that it does occur, i.e. until other government sources such as industry can meet the marginal cost.

It is however noted that some institutions are unable to distinguish between the application of, and return on government funds versus other sources of funding. This is universally considered to be poor practice and there is an increasing focus on accountability for government funding.

8.3.3 Conclusions

Throughout the world countries are striving to develop SQAM infrastructures that are less dependent on Government funding, and levels of Government funding decline as the infrastructures become more mature. It is, however, recognised that governments will always have to fund such infrastructures to a certain degree. Good practice therefore relates more to determining and managing appropriate levels of funding which are dependent on factors such as the level of economic development of the country, the regional context, the maturity of the SQAM institutions, and maintenance of national interest activities that will never be sustainable on a commercial basis.

Recommendation 11: The processes that determine and manage SQAM funding, be reviewed and strengthened by government in accordance with the principles outlined in this report to achieve greater accountability.

The following principles and practices are proposed:

- Minimum core Government funding, with preference for targeted contracts for specific activities.

- Sophisticated resource planning methodologies used by SQAM institutions (zero based budgeting, comprehensive business planning, outcome-based management, etc.) to determine appropriate levels of funding.
- Emphasis on measurable deliverables and high levels of accountability.
- A three year planning cycle. This will reduce uncertainty about security of funding streams, and enable institutions to achieve long term financial and resource planning.

The survey was unable to identify any “whole of SQAM” econometric studies. Apart from an econometric model used by NPL in the United Kingdom to evaluate project proposals for funding priorities, as well as a framework developed by DIN (Germany) to assess the economic benefits of standardisation, no other institutions appear to use such models.

The absence of comprehensive econometric modelling is ascribed to two factors:

- The complexity and difficulty of creating such models.
- The existence of SQAM infrastructures is linked to the overall risk profile of a nation. The focus is not so much on the economic benefits, rather than on the dependency risks associated with not having a SQAM infrastructure.