

## **10 Standards development**

### **10.1 Overview of standards development**

Many common everyday activities are possible only because of the advent of standardisation. It is often not realised how the supply of normally expected services to households such as electricity, gas and water depend on the existence of a large number of voluntary standards. They can cover a wide variety of aspects such as materials, cables, pipes, conduits, connections and fittings, installation requirements as well as the specification of the product being conveyed. The manufacturing industry is another major user of standards where the primary focus is usually the compatibility of component parts and their interconnection.

Standards can provide a basis for producing consistent product and in doing so facilitate economies of scale and enable the production of lower cost goods. Standards provide a means of expressing requirements and ways in which these can be tested and evaluated. They also set down health and safety limits for the community and aim to protect the future of the environment by specifying acceptable requirements.

Standards can appear in a variety of different forms such as design or product specifications, performance requirements, procedural requirements, methods of test and codes of practice. They are written by various bodies including national standards development bodies, Government and regulatory authorities, industry associations and international bodies.

Most standards are developed to ensure a consistent level of product quality and are intended for voluntary adoption by businesses. Voluntary standards facilitate trade and commerce, and the commitment to meet voluntary standards is driven by both purchasers requiring suppliers to meet standards in commercial contracts, and suppliers themselves when they claim to meet a standard. Suppliers are often required by Government regulation to meet specified standards to ensure that products satisfy necessary health, safety and environmental needs.

With the World Trade Organisation's continuing push to free trade, standards have come under the spotlight as having the potential to erect technical barriers to free trade between nations. In recent years this has led to a major effort in harmonising standards, both regionally and globally.

The following Terms of Reference are relevant to the SABS in this SQAM Review.

- Compare the SQAM system of product and service standardisation to that of South Africa's main trading partners as well as comparable economies. Pay particular attention to the level and tempo of adoption of international or regional standards.
- Investigate the separation/privatisation of commercial activities from standards development and publication within relevant foreign standards bodies.
- Benchmark the current level and scope of South Africa government SQAM funding against the levels in comparable economies. Investigate what econometric models are available to evaluate the impact of such spending on economies.
- Evaluate whether the SQAM system of product and service standardisation in South Africa meets industry's requirements and how many international standards must be adopted to serve the needs of industry.
- 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.
- 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.
- Conduct a cost-benefit analysis of SQAM institutions participation and maintenance of membership and agreements with international fora and cooperations such as ISO/IEC, BIPM, ILAC, IAF, OIML, TBT panel of the WTO etc.
- Investigate and recommend the best long-term institutional arrangement and positioning for the NML and SABS.

### **10.1.1 The South African situation**

In South Africa, participation in international standards development activities is covered primarily by the SABS, a variety of Government Departments such as the Department of Health, Department of Agriculture, and the Department of Transport, as well as industry.

Recently a number of "National Standards Bodies" have been set up under the auspices of the South African Qualifications Authority (SAQA), as part of the National Qualifications Framework (NQF). While these bodies deal primarily with standards for training, there is nothing to prevent

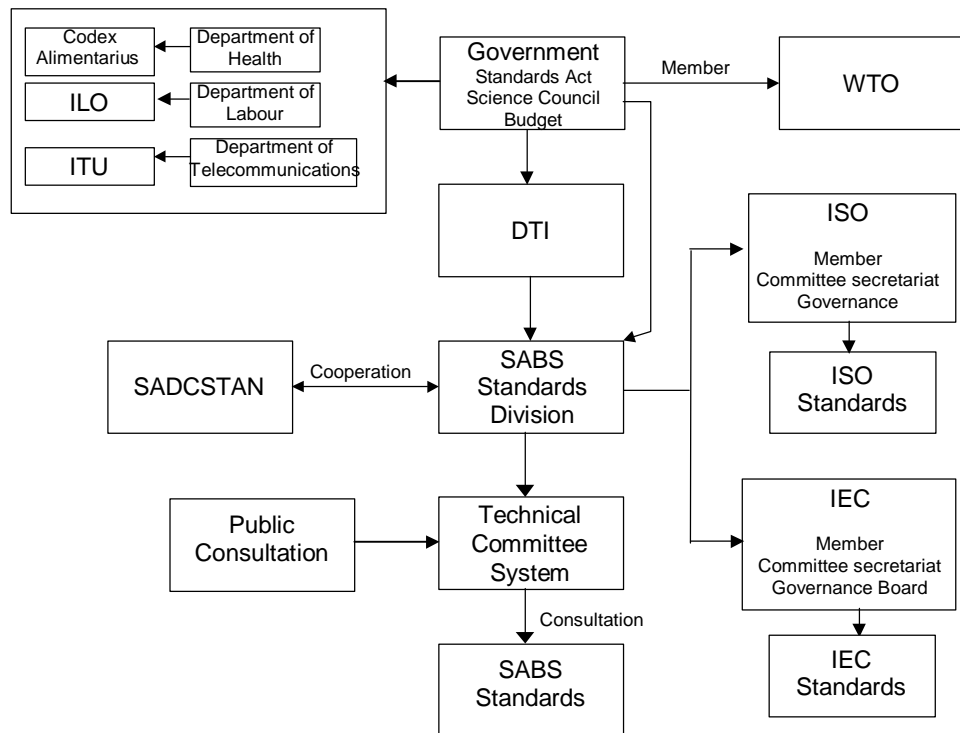
them from preparing standards similar to those prepared by the SABS, although they cannot designate them as SABS standards. They can however be designated as National Standards.

In the military environment, although making use of the SABS standards for many industrial type commodities, unique “own” standards are also developed as required by the military. The major role-players in the military (SANDF and Armscor) have however indicated that they are increasingly pursuing the use of industrial standards, rather than developing their own standards. The Electricity Suppliers Liaison Committee (ESLC) has developed standards for product required in the electricity industry. These standards are published by the SABS, and might eventually become SABS standards.

Since the SABS is the primary standards development organisation in South Africa, its role will be described and analysed in detail.

The Standards landscape in South Africa is depicted in the following figure .

**Figure 7: Standards development landscape**



### **10.1.2 The regional situation**

The SABS can be considered the leading standards development organisation in the SADC region where similar organisations are in many cases of limited nature or non-existent. The SABS actively supports the South African Development Community Standardisation Cooperation (SADCSTAN) and is currently holding the Secretariat of SADCSTAN. The twelve countries involved in SADC have agreed that regional standards will also be based on international standards. With the SABS being the only SADC organisation which is a member of IEC and, the only one represented on the ISO Council and Technical Management Board, it plays a key role in representing the interests of the region. The current role of the SABS in a regional context is very much in the national interest and should receive continued funding support from Government.

### **10.1.3 The international situation**

#### **a) International drivers**

The international standards development landscape is characterised by key differences in the approach to standards development. The level of economic development, and economic priorities, influence the fundamental approach to standards development, type of standards developed, the processes, and the structures involved.

The global standards development environment is facing unique challenges, and will probably change significantly over the medium to long term. Two distinct, but interrelated drivers are of specific significance. The first driver relates to the commercial orientation of standards development organisations, and the second to the national interest role.

- **Commercial orientation driven by harmonisation and technological advances**

The harmonisation of standards on a global basis is a key objective of the World Trade Organisation (WTO). In order for South Africa to meet its obligations as a signatory to the World Trade Organisation Agreement on Technical Barriers to Trade (TBT) it has a commitment to harmonise its standards with International Standards wherever possible. This in effect means that standards will gradually change from being “nationally differentiated products” to become “global commodities”. However, it should be pointed out that the TBT allows specific national variations (e.g. geographical regions, national security, safety), which will mean there will often be specific national variations.

The Internet is also providing standards development organisations with an unprecedented opportunity to sell standards on a global scale. This will mean that consumers of standards will become price sensitive and seek out either the lowest cost standards, or standards coupled with value-added services. Many standards development organisations are already selling standards on a global basis via the internet, but more importantly, a number of standards are becoming freely available on the internet. UN-EDI standards are an example where, in specific circumstances, some are already free to download from the internet.

The implications to standards development organisations are therefore two-fold. They will have to become global players and they will have to develop value-added services around existing standards. Reliance on standards sales for revenue is increasingly becoming a severe threat to many standards development organisations. A rationalisation of global standards development organisations (from many national standards development organisations to a few global service providers) is not impossible in the long term.

- **International involvement**

Although standards development organisations will have to change their commercial orientation, success will also be determined on the ability to serve the national interest. The ability to influence international standards development in the best interests of designated stakeholders, such as industry and government, is largely determined by its involvement, credibility and influence in international bodies such as the ISO and IEC.

- b) International participation and credibility**

The SABS is a founder member of the ISO and a member of the IEC and holds key positions in the management structure of these organisations namely, a council membership of the ISO, a Vice-Presidency of the IEC and a membership of the ISO's Technical Management Board.

The SABS is active in a large number of technical committees (key members in approximately 300 committees and observer members in approximately 150). The SABS is active in about 50% of the ISO and IEC committees and holds the secretariat of a number. South African effort tends to be focused where South African industry is an active participant in world trade. For instance, South Africa holds the secretariat of two of the mining technical committees. In the main, the focus in International Standards work is on areas where it is likely that the International Standard will be adopted. Accordingly, it is normal for a mirror national committee to be formed.

As the National Member Body, copyright of ISO and IEC standards is transferred to the SABS. These international standards can then be adopted as SABS standards without paying any royalties. In accordance with the WTO/TBT Agreement, the SABS on behalf of South Africa participates in the international exchange of information on technical standards, and acts as the WTO/TBT information point.

The SABS' extensive participation and high profile in international forums is considered to be a strength. There is however anecdotal evidence that the number of international committees (50%) in which the SABS participates is very high for a country at South Africa's level of development. This leads to the question: "Is this participation of direct benefit to SA industry, and has there been a recent review of the international work?". It has also been stated that in some areas that the SABS participates in international committees where there is no mirror national committee. These committees provide directions to the delegate, feedback on developments, input and technical comments on drafts, and finally vote on the adoption of the International Standards as national standards. If there is difficulty in getting a national committee together then it must be questioned whether the work is of significance to South African industry. Some years ago, Standards Australia International went through a major review and halved its participation rate. Attention is now very much focussed on those areas of direct benefit to Australia and where there is the expertise to influence the direction of the final standard.

A review of the level of participation could be the task of Sector Policy Boards, or by the SABS in conjunction with industry stakeholders. The latter are most likely to know which areas are of the most relevance. Where there is only minor interest by one or two organisations then committee papers can be made available, on a cost plus basis. It may also be appropriate for staff to maintain a watching brief on committees where South African interests may be affected in the future.

It is essential that the SABS continue to play an active role in the International Standards forums of ISO and IEC, but the extent of participation in Technical Committees should continually be monitored.

**Recommendation 13: South Africa's involvement in international standards committees be reviewed to ensure resources are targeted where they are of most relevance to South African industry and state of development.**

### **c) Delegates to International Committees**

In International Committees the practicality is such that, no matter what the ISO/IEC rules of operation say, real notice is only taken of the viewpoint of countries who actually attend the meetings. This means that to get your viewpoint across or change requirements incorporated into a standard then active and vocal participation is required, particularly at working group level. This is usually better achieved by an industry delegate who has a deeper understanding of the issues involved and who can better argue the case, rather than a staff member who is not actively involved in the industry and who may simply follow proceedings and only write a report for presentation to a committee.

In most other countries a high proportion of the delegates to international committee meetings are from industry. This is currently not the case in South Africa where industry participation in international committee meetings are limited.

Where more than one delegate is involved, or where the International Committee may be involved in extensive procedural negotiations, then it may be appropriate for a staff member who has a knowledge of ISO/IEC procedures to accompany the delegation.

Delegates to international committee meetings would normally be expected to be members of the mirrored national committee. Delegates should be chosen on the basis of technical skills and the ability to represent South Africa's position and contribute in a meaningful technical sense. All delegates should be briefed by the national committee and would be expected to put the committee's views, not the delegates's personal view. After returning from the International Meeting the delegate would be expected to submit a report to the national committee (either written or in a presentation) on the outcomes of the meeting. This would be particularly important where the delegate receives funding from the SABS.

**Recommendation 14: Delegates to international technical committee meetings should be representatives of South African industry, research or government, representing national committees, and be selected on the basis of technical skills, knowledge of the critical issues and national committee support.**

## 10.2 Positioning, recognition and governance of standards development organisations

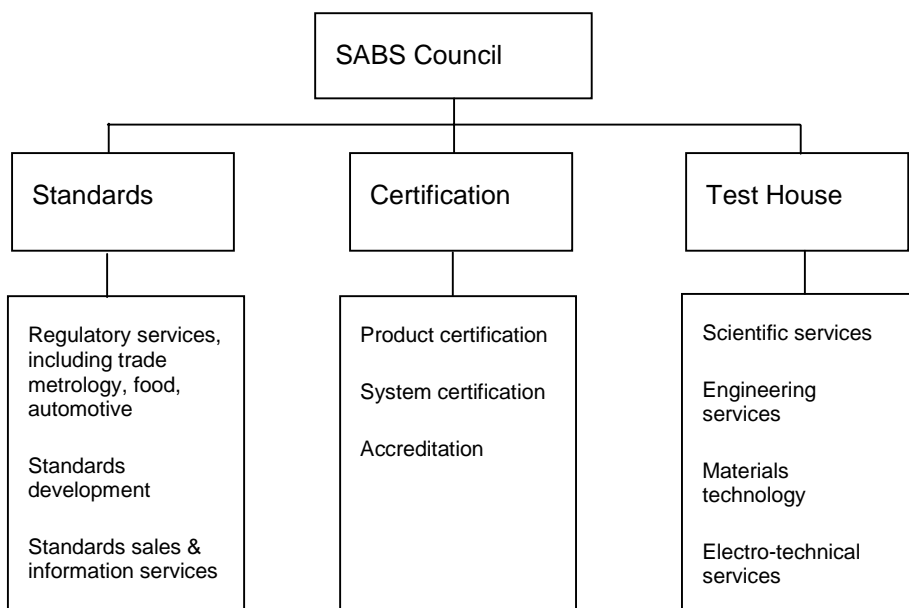
### 10.2.1 The South African situation

The SABS is a Statutory Authority formally recognised and enabled through the Standards Act, Act 29 of 1993. The SABS is classified as a Science Council statutory body, and receives funding as part of the general Science Grant, where it must compete with other Science Councils, such as the CSIR, Mintek, and the AEC, for funding. However, its primary reporting role is to the DTI which also provides policy direction.

Apart from its standards development activities, the SABS also provides testing and certification services on a commercial basis, as well as regulatory services. The Standards Division is ring-fenced from the commercial activities of the SABS, and it is entirely financed by Government, whereas the commercial activities are currently self-funding. No Government funds are transferred from the Standards Division to the commercial divisions (Testing and Certification Divisions), but it is deemed acceptable, in light of decreased Government funding, to subsidise the Standards Division from profits generated by commercial operations.

The following diagram summarises the current activities and reporting structure of the SABS.

**Figure 8: Current SABS activities**



The SABS is an autonomous organisation, and control is vested in a Council consisting of a chairperson and eight other members. The Minister of Trade and Industry appoints the Chairperson and six members. The DTI provides the management reporting mechanism from the SABS back to the Government. Nominations for Council membership are advertised in the Sunday Press and any organisation can submit a proposal accordingly. All appointments to Council are by means of approval by the Minister of Trade and Industry and are for a maximum period of three years. A proposal for a representative from the Department of Trade and Industry (DTI) to be nominated onto Council was declined by the Minister.

The President of the SABS is a member of the Council by virtue of the office and the Standards Act and is also its Vice-Chairperson. The President, acting as Chief Executive Officer and assisted by a Chief Operations Officer (COO) and seven General Managers, is responsible for the day-to-day operation of the SABS.

The SABS Council has recently proposed the revision of the Standards Act which, amongst other changes, has recommended that the size of the Council be increased to a total of ten members i.e. two additional members, plus the Chairperson.

### **10.2.2 The international situation**

A variety of approaches regarding the positioning, recognition, and governance of Standards Development Organisations are followed throughout the world, as the examples below illustrate:

**Australia:** Standards Australia, which operates as a not-for-profit organisation, is one of many standard development organisations within Australia. There is no enabling Act, but it is recognised by the Government as the peak standards development organisation through a MOU. The MOU recognises Standards Australia International as having exclusive right to prepare Australian Standards, but also allows it to accredit other standards development agencies to prepare such Australian Standards. Apart from its standards related activities it manages the Australian Design Award, and owns a subsidiary that provides conformity assessment services. Standards Australia International is managed by a Board of Directors, which comprise 9 members elected by the Council, and an elected Chairperson and Chief Executive. Government is represented on the Council in both a federal and state capacity.

**Brazil:** The Brazilian standards development organisation, Associação Brasileira de Normas Técnicas (ABNT), is a private, non-profit organisation that is recognised by the Brazilian Government as the national standards body (Federal Law No 4150 of 1962). It is empowered to

accredit other standards development organisations and also provide certification services for products and systems.

ABNT is governed through the General Assembly, the Deliberative Council, (which includes government and industry representatives) as well as the Councils and Committees that oversee the operations of ABNT, for example the Financial Council, the Technical Council, the Committee for Accreditation and the Committee for Certification.

**Malaysia:** The Department of Standards (DSM), is a Government department within the Ministry of Science, Technology and the Environment, and responsible for policy setting in relation to standards development, national representation in international forums, and for approving and issuing Malaysian standards. Apart from its standards development related activities, it also performs accreditation activities. DSM has appointed SIRIM Berhad (which is responsible for scientific R&D for national interest purposes and some conformance and standards activities) as the Standards Development Agency for the co-ordination of actual standards development work, as well for the accreditation of standards development organisations.

**United Kingdom:** BSI is an independent, non-profit distributing organisation incorporated by Royal Charter since 1929. A Memorandum of Understanding between the United Kingdom Government and BSI (last renewed in July 1995) recognises BSI as the national standards authority for the UK. Apart from its role as a standards development body, it also provides testing and certification services on a commercial basis. The Standards Division is however ring-fenced from the commercial operations.

There are no separate enabling Acts or Regulations authorising its functions. Although some standards are written by other parties in the UK, BSI is the only body publishing national voluntary standards. BSI does, however, delegate to some 20 other bodies the responsibility for preparation of some British Standards, but maintains close supervision.

The Board of BSI consists of a Chairman elected annually by the Board members, the Chief Executive, not more than five executives of the Institution (but including the Director of Standards) and up to six non-executive members. There is no reserved right of representation by Government on the Board, but government officials could be appointed. Government does, however, have specified representation on the Standards Policy and Strategy Committee (OC/13) whose role, inter alia, is to “be responsible to the BSI Board and to its stakeholders for safeguarding the coherence, integrity, independence and impartiality of the UK standardisation process”. Apart from a DTI member, other representatives on OC/13 include a Chairman, up to

15 members from a range of business, consumer and government interests and up to six staff from BSI. Committee OC/13 has 12 terms of reference to exercise its advisory and strategic advice functions.

### 10.2.3 Conclusions

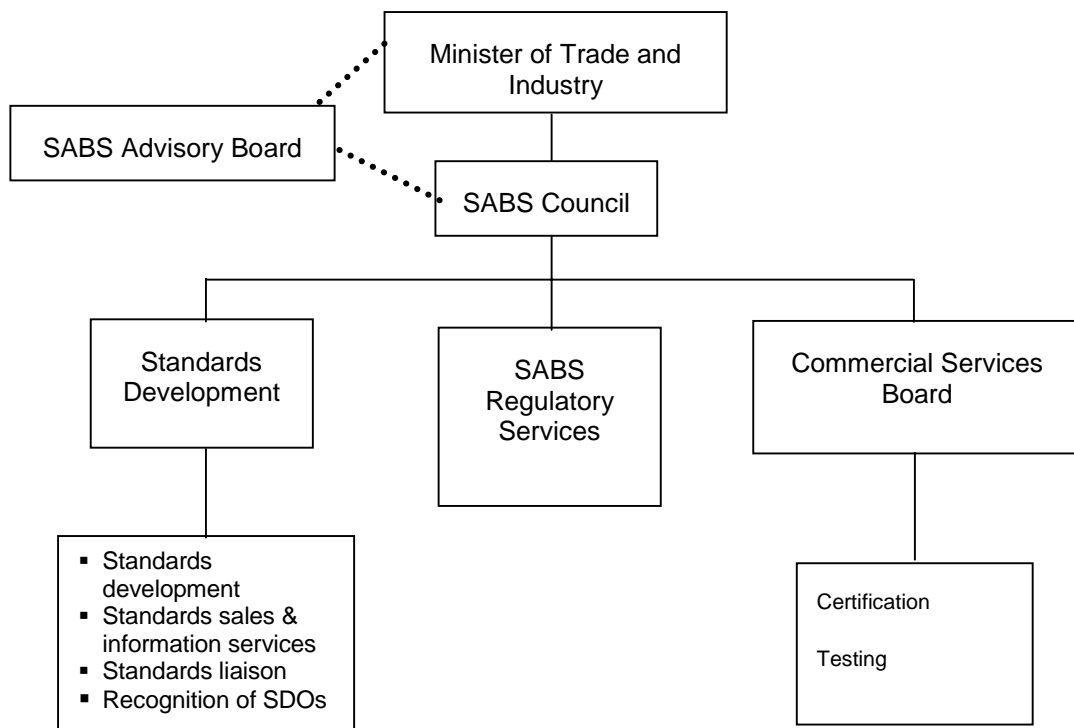
#### a) The re-positioning of the functions of the SABS

Prior to making any recommendations on governance and positioning of the SABS it is essential to consider the appropriate positioning of all its activities within the broader SQAM environment, as recommended by this review, as follows:

- The commercial activities of the SABS (Test House and Certification Divisions) pursue commercialisation and then corporatisation as a strategic imperative.
- The trade metrology activities of the SABS be transferred to the DTI .
- The regulatory activities of the SABS be a separate division within the SABS.

A proposed structure for the SABS, which summarises the impact of the above recommendations, is shown in Figure 9.

**Figure 9: Proposed SABS structure**



## **b) Role of the SABS as the National Standards Body**

In most countries surveyed as part of this study, the government formally recognises only one organisation as the “peak” or “national” standards development organisation, with the sole right to publish national standards. These “national” standards development bodies are then empowered to “accredit” or oversee the development of standards by many other standards development organisations.

This is not currently the case in South Africa where, as mentioned, a number of “National Standards Bodies” have been set up under the auspices of the South African Qualifications Authority (SAQA), as part of the National Qualifications Framework (NQF). Although it is recognised that there is room for many standards developing organisations, each operating in a specific field of expertise, it may not be in the interest of South Africa, especially in the SADC context, to have a proliferation of organisations developing, maintaining and publishing National Standards. In the case of the development of National Standards, there is a need for one organisation to oversee the process (directly or through approval). This organisation should then be responsible for publishing National Standards, and act as the WTO information point.

In every other country examined there was a single National Standards Body (NSB) that was responsible for National Standards in the technical, management and service fields. A number of these bodies also produced national standards in the food and training areas. These organisations were either Government or private and there were often second level standards bodies (USA is the best example of a two tier approach) creating industry standards that were restricted in their use to the industries affected.

The imprimatur “national standard” has implications in two main areas:

- Confidence by the user that the standard is “national” in its origin and applicability.
- The Standard has been prepared by a recognised process that includes extensive consultation (and possibly consensus) with the opportunity for affected stakeholders to provide input and comment.

Although the title of standards may not include “National Standard” in the document (e.g. Australian Standard) the implication is there and the standards are collectively referred to as national standards. In some countries National Standard is included in the document (e.g. USA).

Considerable confusion, and lack of confidence, can be engendered if poorly prepared, and possibly biased or incorrect documents can be titled “National Standard”. There is also the potential for organisations or individuals to start entering the fields of standardisation currently covered by the SABS and producing competing documents. Both situations could lead to a weakening of the SABS standards and a loss of confidence in the standardisation process and infrastructure.

The most effective way of resolving this is through a formal agreement with Government that there is a peak national standards body solely responsible for preparing and/or approving national standards. In some countries this is by an MOU (e.g. Australia) but in the case of South Africa an amendment to the Act would appear appropriate. To clarify the situation in South Africa the national standards could be titled “South African National Standards”.

**Recommendation 15: The amended Standards Act to clearly define the SABS as the national standardisation body and the sole body responsible for recognising SDO’s for the preparation of South African National Standards.**

In some circumstances industry bodies or special interest groups will want to prepare their own standards to be applied on a national basis. This is understandable and is a mechanism often used in other countries to both reduce the costs of the National Standards Body and allow industry bodies to take control of the preparation. In this case there should be an opportunity for organisations (not an individual) to become an recognised Standards Development Organisations (SDO) and prepare national standards. It is worth noting that all USA national standards are prepared in this way.

In regard to the recommendation that the SABS be given sole authority to recognise other organisations to prepare South African National Standards, the advantages of retaining the SABS as the recognition body are:

- The SABS has a high degree of technical excellence in preparing standards including the often complex process of resolving negative votes.
- The SABS is a member of a number of international organisations and in participating in the global arena is exposed to industry best practice.
- Being constantly involved in the international arena the SABS can quickly incorporate new ideas and trends and can inform the SDOs of these trends.

- Recognition of SDOs is only a marginal extra cost to current standardisation activities (e.g. Australia was able to use existing in house resources for reviewing applications and auditing the SDOs). Other organisations would require considerable extra funding and would probably have to contract the SABS to provide specialist auditors and reviewers.
- It is common international practice for the National Standards Body to recognise other standards development organisations.

The SDO must comply with operating principles that embody the concepts of transparency, consensus and/or extensive consultation, and work under rules similar to those currently used by the SABS. When assessing an SDO, its technical skills as well as its commitment and expertise in bringing together all stakeholders and using a consensus process would be critical.

SDOs would need to be audited to ensure they are complying with requirements of their recognition. Once the document was completed it would be approved by the SABS as a South African National Standard.

The SABS should prepare the operating rules for recognised Standards Development Organisations (including appeal mechanisms) using as a basis the ISO Directives and the WTO Technical Barriers to Trade *Code of Good Practice for the Preparation, Adoption and Application of Standards*. The SABS is a signatory to the Code of Good Practice and consequently adheres to these international rules.

The recognition rules for Standards Development Organisations should be maintained and administered by an appropriately constituted Standards Accreditation Board (e.g. representation from relevant government, industry and user organisations), responsible to the SABS Council, which should operate using open transparency, consensus and consultation. The basis for the approval or rejection of any application by an organisation to become recognised by the SABS should be available as a public record.

In certain circumstances organisations may not wish to become recognised (or may not comply with the rules) in which case they would be prevented from using the term “South African National Standard” or “National Standard” in reference to their publications. Alternate terms such a “National Guidelines” or “National Specifications” would be suitable.

### **c) Designation of standards**

South Africa is unusual in having the national standards designated as “SABS Standards”, i.e. indicating the body which prepared them, rather than indicating the country to which they

belong. International practice is to clearly label the standard with the country to which it applies. The documents then include the name of the organisation that wrote and/or approved them in the inside front cover or the Preface.

Having the country in the designation sends a clear message to users that the standards are “national standards” and with all that implies. It also reinforces the national role of the standards body and its agreement with government.

The SADC proposal to have regionally harmonised standards adopted as national standards is also a good reason to change since other countries in the region will be adopting the SADC standards as national standards with country designations. South Africa would be “out of step” by having their standards named after the standardising body.

The question of certifying marks has been discussed elsewhere, and has the proposal to have the SABS commercial and testing services become a commercial company and compete with similar companies on a “level playing field”. Since the SABS mark has such a high reputation it is a real commercial asset (similar to other well known trade marks) and it would be highly desirable if the new company could retain the use of the mark. However, objections would certainly be raised if both the mark brand and the product standard contained the same designator i.e. “Certified by the SABS to SABS 1234”. Re-designating the SABS standards as South African National Standards (SANS) would avoid this problem i.e. “Certified to SANS 1234 by the SABS”. It is really a question of whether the cost and effort of changing the designation is worth the benefit of a more open national identity, levelling the playing field for other certification organisations and the ability for the SABS to continue to use the SABS mark without the Government being seen to favour one organisation. The Review Team considers the change in designation of the SABS standards should be made.

It is recognised that the re-designating the SABS Standards as national standards (SANS) would be costly to industry in terms of retooling the dies used to mark products, as well as changes to contracts, etc. Considering the advantages of the proposed re-designation compared to the cost, it would be in national interest to gradually phase in the change over a period of years.

**Recommendation 16: The SABS standards be re-designated as “South African National Standards” and numbered accordingly.**

#### d) Corporate status and recognition

The status of the SABS as a Science Council can, and has been, questioned on numerous occasions. The science system in South Africa is geared towards innovation, and the general opinion is that the SABS is not a research-based organisation. Standards are often the end-result of research rather than research itself, and in cases where the SABS deems it necessary to do proactive research into specific standards related matters, it could access funding from the “Innovation Fund”, as would any other organisation.

Apart from the appropriateness of the existing classification of the SABS as a Science Council, there is also the question as to whether the SABS should be formally recognised as a Statutory Authority, enabled through an Act, or whether it should to a “Section 21” (Not for Profit) organisation without an enabling Act. Recognition of its “national interest role” in the latter instance could then be through other mechanisms such as MOAs with Government.

Table 8 is an analysis of the options:

**Table 8: Analysis of the SABS status**

<b>Decision Factors</b>	<b>Statutory Body - Science Council</b>	<b>Statutory Body - DTI</b>	<b>Section 21 No enabling Act</b>
Operational fit	Inappropriate, Standardisation is not a research activity, but is often the end product of research. Provides opportunities for close links with research.	Standards essential to trade and industry. Used in technical regulations which requires close liaison with regulatory arms of government. Government has more direct control over operations.	No direct conflict or synergy.
Policy direction	Objectives of SABS and research bodies different. Policy direction could be inappropriate. Able to influence Government policy	Direct policy direction should be provided. Able to influence Government policy.	Able to receive suggestions but not directions. Will need to be proactive and responsive to retain credibility. No direct and formal links but able to form relationships and provide input as required.
Funding constraints	Have to compete with other organisations with different remits. Level of funding not assured. No links between funding and policy initiatives (e.g. special funding for special programs). Administration often onerous since accounting for public money. Little opportunity for increased funding or variations to the grant. No guaranteed continuity of funding since determined by NACI on an annual basis.	Budget can be assured (or at least stable!) with no competition. Close link with policy and funding including special funding for projects and government initiatives. Administration often onerous since accounting for public money. Little opportunity for discretionary expenditure for internal priorities. Able to make direct submissions to the minister for variations to funding or for special projects.	Freedom to allocate funds on an internal priority basis. Able to seek outside sources of funds, including government grants for special projects.

<b>Decision Factors</b>	<b>Statutory Body - Science Council</b>	<b>Statutory Body - DTI</b>	<b>Section 21 No enabling Act</b>
Status as National Standards Body	Not affected since should be specified in the Act. Government able to easily direct other government agencies to comply. Possible regulatory sanctions for non-compliance.	Not affected since should be specified in the Act. Government able to easily direct other government agencies to comply. Possible regulatory sanctions for non-compliance.	Would require special agreement with the government (MOA). Negotiation and persuasion required to ensure compliance by government and private bodies.
Staffing	Not affected other than through general budgetary restrictions.	Not affected other than through general budgetary restrictions.	Able to be more imaginative with staffing policies and salaries. Not tied to any specific grading scheme.
Activities	Priorities and activities restricted by funding. No direct input or constraints by DACST into day-to-day operations	Potential for direct interference since SABS is operating in the same policy area. May not be able to respond quickly to new directions or imperatives if in conflict with Departmental policy.	Able to determine activities without interference, but would need to listen carefully to stakeholders. Quicker response since resources can be quickly reallocated.
Accountability	Potential conflict	To the DTI.	Accountable to stakeholders
Impact on the rest of SQAM	No benefit or disadvantage.	Considerable benefit since parts of SQAM are also in the Government and the SABS would have the support of the DTI in interactions.	Some benefit since with no government accountability the SABS would be able to enter freely into partnerships. Some disadvantages in that Government has less leverage to align strategy with whole of SQAM.
Impact regionally and internationally	No impact since the DACST has no direct input into operations of the SABS.	Some enhanced credibility especially regionally since the SABS would be seen as an arm of a government which would have similar ideals to other nations in the region. No particular advantage internationally. The SABS already has a high reputation.	No particular advantage since the SABS already has a high reputation. May be at a disadvantage when dealing with regional standards bodies that are arms of Government. (cf the proposal to contract standards preparation work for regional countries)
Maturity of the standards environment	Except in the developing industries the standardisation environment is mature. There is no advantage in being classified as a Science Council.	There may be some advantage in associating with DTI since there are synergies when developing programs for developing industries. Some disadvantages if this is perceived as acting on behalf of DTI alone rather than the whole of Government.	There may be some doubt that the community is mature enough to have the SABS operate in this mode
Risks	Few risks other than the uncertainty in funding.	Few risks other than a potential decline in the level of funding. Even if the commercial arm fails there would be still be the opportunity for government funding	High risk since funding would not be guaranteed. It would depend on a commercial focus of staff and the skills may not be present (cf the New Zealand case)
National interest	Negative effect due to separation of funding and policy.	Due to policy and funding links can be responsive to the national interest and the Government's agenda.	National interest activities may be at risk since all work would be on a commercial basis.
Regional interest	Can actively support Government objectives regarding regional harmonisation and capacity building.	Can actively support Government objectives regarding regional harmonisation and capacity building.	There is a risk that regional activities might be compromised as a result of less direct Government control.

From the analysis it can be readily seen that at this stage of development there is still a considerable benefit to both SABS and South Africa with the SABS remaining as a government organisation, operating in the national interest. However, it is concluded that the current classification of the SABS as a Science Council is inappropriate and policy and funding should be provided by the DTI.

Moving immediately to a Section 21 organisation may have the effect of reducing the SABS standing in the community and also have the potential to make funding less secure. Standards may not have the same acceptance if they were perceived as being prepared by a “private organisation” rather than a Statutory Body. SABS as a Section 21 organisation may well have different objectives and stakeholders from its present arrangements and may not be able to sufficiently focus on national interest projects. These could be regarded as being of lower priority even if undertaken on a fee for service basis. In the longer term, there might be an advantage in moving to a private not for profit organisation since this could improve flexibility, potentially reduce direct Government funding and open up opportunities to take on new value added activities.

**Recommendation 17: The SABS be reclassified from a Science Council Statutory Body to a Statutory Body responsible to the Minister of Trade and Industry with funding through a direct grant from DTI, which would also retain overall policy direction for national interest activities.**

#### **e) Governance**

Considering the proposed corporatisation of the Certification and Testing Divisions of the SABS, whilst still retaining national interest responsibilities (standards development, regulatory services), it is clear that the role and composition of the Council need to be re-assessed, within the context of the overall governance of the SABS. The future requirement will be two-fold, as follows:

- The need for strong accountability to a range of stakeholders for national interest activities
- The need for strong accountability to shareholders for the effective and efficient business management of the commercial and non-commercial activities of the SABS.

In practice it is extremely difficult to have a single governing body that fulfils both roles. This is reflected in the current role and composition of the SABS Council, which attempts to combine the role of looking after the interest of various stakeholders from a “representation” perspective,

but is also expected to be directly responsible for the organisation from a “business” perspective.

Good governance would be to have clear separation of accountability and responsibility from a “representation” and “business” perspective. It then allows for both “representation” skills as well as “business” skills to be embodied within the governing structures.

The need is therefore for the establishment of a SABS Advisory Board, in addition to the current Council, which composition need to be clarified, as follows:

### **The role and composition of the SABS Council**

Fiduciary and other responsibility for the SABS and its subsidiaries will continue to vest with the Council as dictated by the Public Finance Management Act. While not being as aggressively commercial as the Board of the proposed subsidiary, the Council would still be expected to exercise sound strategic, financial and managerial responsibility within the framework of the national interest. Among other issues, the Council would benefit from focussing on the following:

- The national interest activities (standards development and regulatory services).
- Facilitate and encourage the development of commercial, value-added services.
- Receive status reports and financial statements from the commercial subsidiary.
- Monitor and facilitate regional and international involvement.

The SABS Council will continue to report to the Minister of Trade and Industry, and will receive strategic direction from both the Minister as well the proposed SABS Advisory Board. The exact constitution of the Council should be determined by the SABS in consultation with stakeholders, and approved by the Minister. Representatives will continue to be elected from stakeholder groups, but with an strong emphasis on the election of individuals with demonstrated business acumen.

To ensure adequate representation the Council may need a small increase (beyond 10) in size, but 15 should probably be the maximum.

### **The proposed SABS Advisory Board**

The SABS Advisory Board should be formally constituted with an independent Chair elected by the Board members. The membership of the Board should be established by the DTI inviting stakeholder groups to nominate representatives. The stakeholder groups should include members of the Sectoral Advisory Boards (see section 10.7.2), regulatory agencies, industry, labour, and community interests. A maximum membership of approximately 18 would be appropriate.

**Recommendation 18: The establishment of a SABS Advisory Board that provides strategic direction and advise to the SABS Council. The proposed Advisory Board is formally constituted to be representative of major stakeholders. The SABS Council continues to oversee the operation of the SABS, with representatives elected from stakeholder groups, but with an emphasis on the election of individuals with demonstrated business acumen.**

#### **f) Role of the DTI**

The absence of Government in the governing structures of the SABS, as a primary stakeholder and fund provider, is seen to be a weakness.

Irrespective of the source of funding for the SABS, the DTI has a leading role, both under the current institutional arrangements and under the proposed changes. The Department provides policy direction, assists in determining strategies, and is the direct conduit to the political process. The proposed constitution of the Council would include a position for a DTI representative. It is understood that the DTI was offered a position on the current Council, but did not take it up. This is unfortunate. As the major “shareholder” in the SABS, DTI needs to take a high profile in the management of the SABS.

**Recommendation 19: The DTI, SANAS and the NML be represented on the SABS Council.**