

The South African National Accreditation System (SANAS) was inaugurated in 1996 as a Section 21 company and is currently the ninth largest, internationally recognised national accreditation body in the world.

Accreditation, standards and energy management

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The creation of a single national accreditation body, SANAS, allowed South Africa to remain competitive nationally and internationally because of the ability to confirm competence of its technical infrastructure independently. Accreditation is used increasingly by South African regulators as part of managing local regulatory risk to ensure the competence and consistency of service providers in the local regulatory domain.

The role of SANAS

SANAS is recognised as the only national body responsible for carrying out accreditation in respect of conformity assessment, including calibration; testing and verification laboratories; certification and inspection bodies; rating agencies and monitoring of good laboratory practice (GLP) compliance with principles adopted by the Organisation for Economic Co-operation and Development (OECD).

Accreditation, together with metrology, standards and conformity assessment, is referred to as the "technical infrastructure" (see Fig.1). Globalisation is increasing the demands on countries to demonstrate that they have this technical infrastructure to guarantee that products originating in their territories are safe and fit for purpose, and to meet the standards and measurement challenges required by health and safety considerations, environmental consideration and considerations of end-user protection.

The importance of accreditation

Many countries and regulators rely on

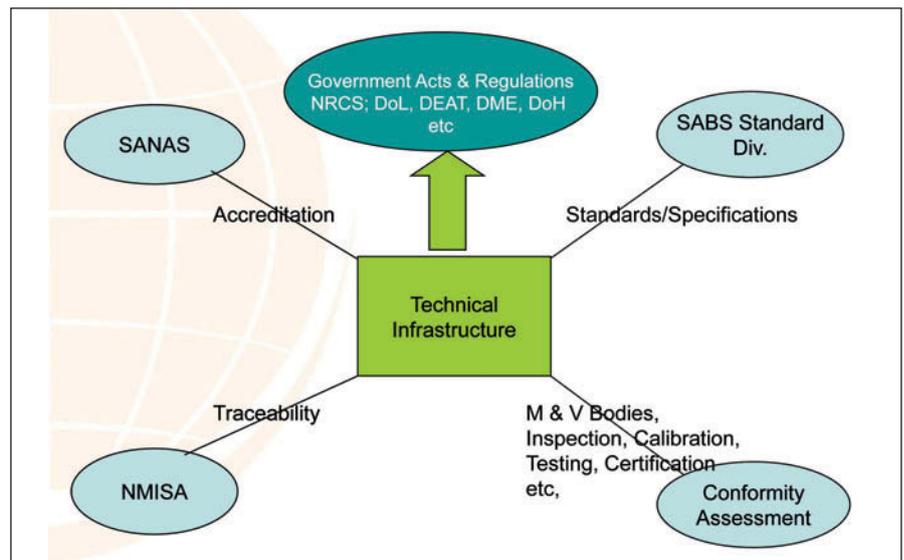


Fig. 1: Technical infrastructure in South Africa.

accreditation by means of transparent and impartial criteria and procedures to determine technical competence based on appropriate national and international standards specifically developed for this purpose.

Technical assessors conduct thorough evaluations of all factors in laboratories, inspection bodies or certification bodies that affect the results of test, calibration and inspection data and/or production processes. Accreditation bodies such as SANAS assess factors relevant to an organisation's ability to produce precise, accurate test, calibration and inspection data including the

technical competency of staff; validity and appropriateness of methods; traceability of measurements to national standards; suitability, calibration and maintenance of equipment; suitable environmental conditions; handling of test and inspection items and quality assurance processes.

SANAS is a third party accreditor and must comply with ISO/IEC 17011 General requirements for accreditation bodies accrediting conformity assessment bodies. It is not allowed to consult or assist organisations obtaining accreditation, but does offer as generic 17020, 17021 and 17025 system courses.

SANAS supports government's objectives by offering technical infrastructure to meet the standard and measurement challenges required by health and safety considerations, and to protect end-users from unfair trade practices. It aims to increase market access opportunities for export of South African goods and services and contributes towards building skills, technology and infrastructure platforms from which enterprises can benefit.

Global connection

A mutual recognition arrangement (MRA) between accreditation bodies exists with an understanding that an organisation accredited by one partner is recognised as possessing equivalent competence to an organisation accredited by others. There are two main types of MRAs, namely the government-to-government known as agreements, and the voluntary sector between accreditation bodies known as an arrangement, which accesses the multiple providers of compliance data both in SA and abroad. Regulators benefit from these MRAs and reduce the needs for government compliance testing, allowing for appropriate harmonisation and recognition of equivalence of regulatory requirements. There are currently 59 accreditation bodies representing 46 economies in the international MRA, benefiting the export and import of goods into our country.

What makes SANAS acceptable?

SANAS complies with international criterium ISO/IEC 17011, which includes management system criteria and a demonstration of its technical competence with regard to the various sectors it accredits in. It has a formal, documented complaints procedure for both its own activities and for those with whom it has formal MRA arrangements. The constant international interaction, recognition of competence and benchmarking are some of the benefits of becoming accredited. The customer has access to independent complaint mechanisms and to impartial feedback from independent examinations by experts against a defined scope of activity and comparisons of technical ability against similar facilities.

Accredited organisations

Accredited organisations issue inspection, test or calibration reports bearing the SANAS symbol indicating their accreditation. Potential customers can verify with the organisation what specific inspection, tests or

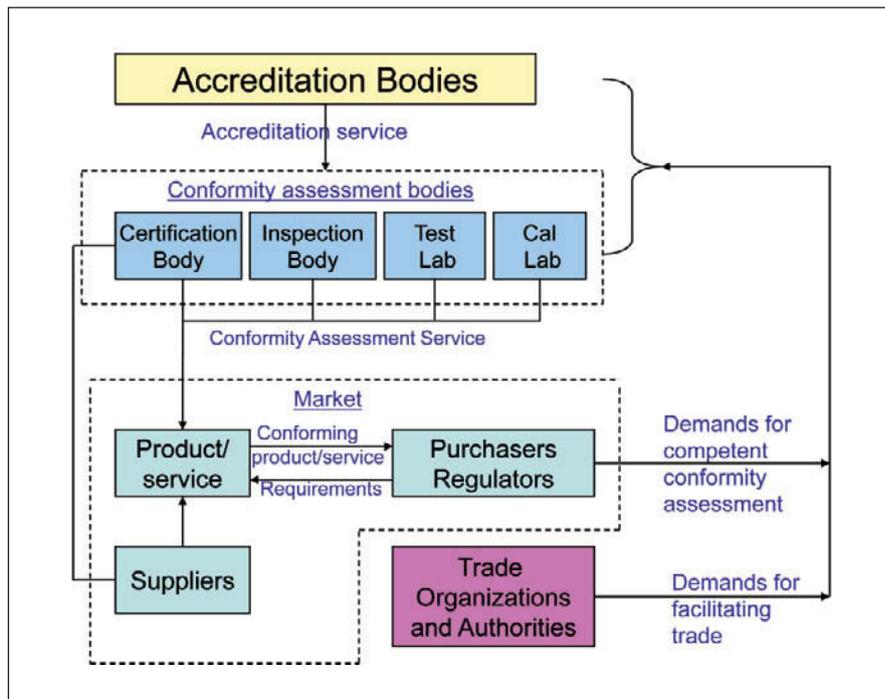


Fig. 2: SANAS provides supervision in the accreditation market in South Africa.

measurements they are accredited for, for what ranges and scope, etc. This is specified in their scope of accreditation, which should be supplied by the organisation upon request. SANAS also has a published directory of the facilities which it has accredited available at www.sanas.co.za. This directory contains organisations' contact details and information on their specific capabilities. Regulators need confidence in inspection, test and calibration data and the accreditation provides independent technical appraisal for both domestic and foreign bodies' confidence. South Africa has established a world class technical infrastructure which supports both local and international requirements with credible results.

Standards

Standards and specifications play a big role in South Africa and are developed by certain companies for their own use, but they can also be developed through the SABS and be published as private specifications. These standards include calibration, testing, inspection and certification developed for private organisations and government departments. Customers' requirements are defined clearly in the specification, which ensures advanced manufacturing practices and products of high quality based on national standards. If you apply for certification based on ISO 50 001 you will need a certification body to verify the requirements. SANS 50 010 involves the accreditation of measurement and verification (M

and V) of your energy savings for which SANAS is the accredited body. Main clauses to note in the certification process of ISO 50 001 include the implementation, operational control and the procurement of energy services, products, equipment and energy. Constant performance checking through monitoring, measuring and analysis is vital for certification. In the accreditation process of SANS 50 010 the calculation of the baseline in the determination of energy savings is vital, as well as the correct methodology of M and V.

Conclusion

Supervision in the market, as indicated in Fig. 2, forms a big role in accreditation where certification and inspection bodies, test labs and calibration all work together depending on the product, and what the regulator and consumer wants to the benefit of a credible industry. SANAS conducts on-site verification to ensure that results are demonstrated beyond reasonable doubt as being correct through checking meter calibration, whether calibration is traceable, whether processes and meters are in line with the national standards, etc.

Acknowledgement

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