

To: Ms Anna-Marie Lötter Directorate: Technical Infrastructure Department of Trade and Industry	Priority: High (deadline: 28 February 2019)
From: Mr Ndwakhulu Mukhufhi Chief Executive Officer National Metrology Institute of South Africa	Date: 18 February 2019
Subject: NMISA Comments on Government Notice No. 1381 (ICASA: The Draft Conformity Assessment Framework for Equipment Authorization)	

1. Overview

The introduction to the Framework does take note of SABS, SANAS and NRCS and the role of standardisation, accreditation and regulation, but omits the National Metrology Institute of South Africa (NMISA) and metrology (i.e. the science of measurement), which is an essential part of a national quality infrastructure.

It is implicitly assumed that accuracy of measurement will be provided for by SANAS accredited testing laboratories (as traceability to the national measurement standards maintained by NMISA is a requirement in both the SANAS Act and the Legal Metrology Act). Consequently, the impact of unreliable measurement results on telecommunications is significantly underestimated and could be costly.

Measurements performed for regulatory or legal purposes require traceability through a national reference, as provided by NMISA. Regulations also apply to the use of measurement instruments in areas of trade and telecommunications, and the calibration of these instruments need to be traceable to the national measurement standards (NMS).

NMISA was established under the Measurement Units and Measurement Standards Act, No.18 of 2006 (The Measurement Act);

“To provide for the use of measurement units of the International System of Units (SI) and certain other measurement units; to provide for the designation of national measurement units and standards; to provide for the keeping and maintenance of national measurement standards and units and to provide for the establishment and functions of the National Metrology Institute”

As one of the dti's Technical Infrastructure (TI) institutes, NMISA's activities are critical to the success of the other TIs. Standardisation, metrology, conformity assessment and accreditation are key aspects of the implementation of free

trade agreements between countries or economic trade blocks. Together the TIs work towards ‘measured once, accepted everywhere’.

South Africa is a signatory of the Metre Convention of 1875 that created the International Bureau of Weights and Measures (BIPM) to act in matters of world metrology. In 1999, South Africa signed the International Committee for Weights and Measures (CIPM) Mutual Recognition Arrangement (MRA). The CIPM MRA provides an open, transparent and comprehensive scheme to give users reliable quantitative information on the comparability of national metrology services and provide the technical basis for wider agreements negotiated for international trade, commerce and regulatory affairs. It is the basis for the international acceptance of calibration and measurement certificates issued by National Metrology Institutes (NMIs) and in turn provides the framework for the international recognition of conformity assessment and testing.

It is therefore recommended that Metrology be included as an integral part of the Framework and a proposal for implementation is given below.

2. Summary of Proposal

It is proposed that NMISA and the concept of traceability to the SI be included in the Abbreviations and Definitions, and that a paragraph be added to explain the required traceability (and use of the units).

In addition:

- a. Correct the section on WTO notifications to make it clear that under Technical Barriers to Trade (TBT) Article 2.9, all relevant draft regulations must be notified for comment by signatories (the 60-day stand-still period). If it is based on an international standard (i.e. ISO, OIML, etc.), then in defined cases it is not necessary to notify.
- b. Add to section 1 on page 15:
Scientific Metrology institutes around the world have signed an International Committee of Weights and Measurement Mutual Arrangement (CIPM MRA) that allows for the mutual acceptance of calibration certificates covered by peer reviewed Calibration and Measurement Capabilities in the International Key Comparison Database held by the International Bureau of Weights and Measures (BIPM).
- c. Add to section 2.1 on page 19:
NMISA is responsible for the correct application and use of the International System of Units (SI) in South Africa, and to maintain the national measurement standards (NMS).

NMISA is a signatory to the CIPM MRA. The diagram in figure 1 below illustrates the countries that are affiliated with the BIPM and the CIPM MRA.

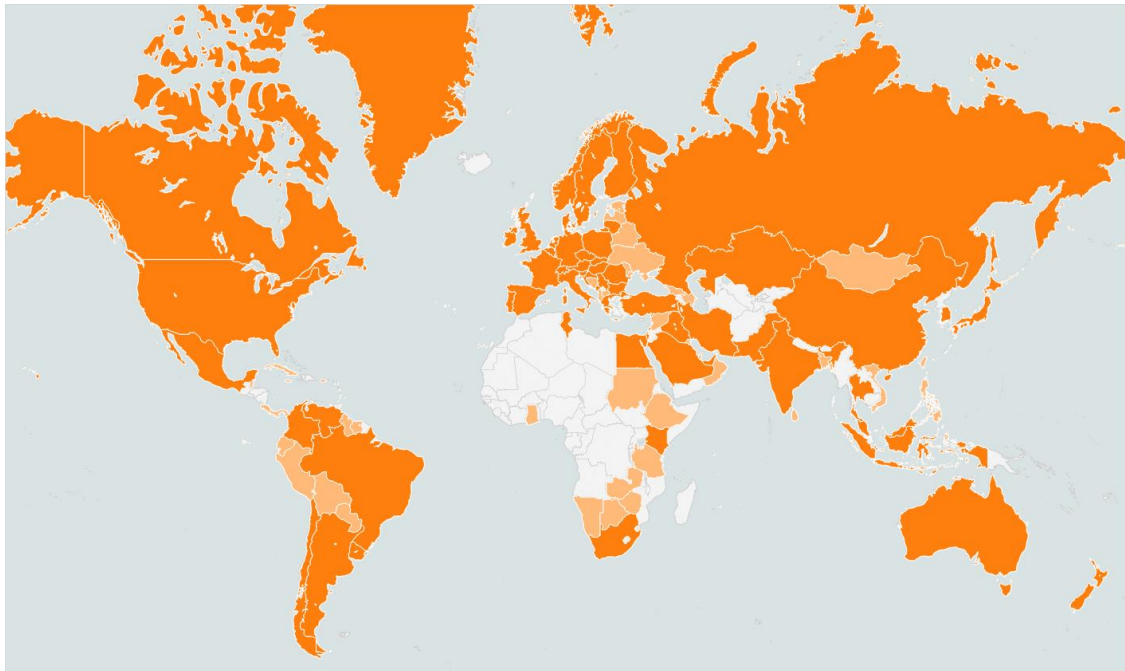


Figure 1: Countries affiliated with the International Bureau of Weights and Measures (BIPM, French Abbreviation)

3. Detailed Comments and Recommendations on Draft Conformity Assessment Framework

- It is understood that the main submission is that the Authority can designate or recognise test laboratories and then exempt certain equipment from the conformity assessment process. The need to take this function over from the legislated accreditation body that would ensure that the testing is internationally acceptable, is not clear. If the intention is to designate from officially third-party accredited laboratories and not through a basic procurement process, this may lead to fraud as the selection process may be subjective.
- It must be very clear in the Framework that the testing laboratories should be accredited, not only “adhere to ISO 17025 principles”. The accreditation process is necessary to ascertain the competence of staff and traceability - it is not ensured by only adhering to the standard. Periodic surveillance is then necessary to assess if the system is maintained, as is provided through the official accreditation process.
- It is assumed that “testing laboratories” also means “calibration laboratories” in this Notice due to the reference to ISO/IEC 17025. It should be expressly stated that “testing and calibration laboratories” are obliged to use calibrated equipment to perform the testing of equipment as required by ISO/IEC 17025.
- Question 4: This process is in place through the ILAC MRA, i.e. testing facilities in other countries will comply if accredited through an ILAC MRA signatory.

- Question 5: The South African Technical Infrastructure is based on international best practise and thus ensures conformity assessment that is internationally acceptable. To introduce a “less invasive” regime may simply mean that it is no longer internationally acceptable. This will allow for easier access of low-quality products into South Africa and would mean that exporters still need to follow the “invasive” process, thus putting export to a disadvantage to imports.
- Section 8.1: Although it is implied in this section that testing must be done by an accredited to ISO/IEC 17025 facility, it is not very clear in the first paragraph. Can a facility just be compliant without being accredited? It is proposed that it is made a requirement that the facility be accredited by an ILAC MRA National Accreditation Board.
- Section 8.2:
 - Equipment utilised by NMISA to realise national measurement standards must be included in the list of exemptions (Table 4).
 - Exemption may be beneficial to reduce the administrative burden for low-risk equipment, but this system has a high risk of abuse. Some categories make sense, such as amateur radios, but test and measurement equipment “used by professionals and engineers” are problematic. There is no guarantee that the professionals and engineers would understand the quality system requirements for test and measurement equipment to be accurate, hence it can result in a system of inaccurate testing and measurement equipment that in turn would lead to non-compliant telecommunication and broadcasting services.
 - As much as the Authority retains responsibility for the conformity assessment of high-risk products, whereas medium and low-risk products may be considered for exemption, the determination and classification of products or equipment as medium or low-risk may need to be carefully considered, otherwise products may be exempted from conformity assessment yet while having a negative impact further up the value chain. At least some form of surveillance (market surveillance or conformity assessment surveillance) should be performed for such products (even though Type Approval may not necessarily be required according to the Authority) instead of completely exempting such equipment from any form of conformity assessment.
- Regarding general references to national standards:
 - In the case of ISO/IEC standards that have been adopted in South Africa, reference the SANS number as well (e.g. SANS 17040:2005 ISO/IEC 17040:2005; SANS 17025:2018 ISO/IEC 17025. etc.)
 - Some standards referenced are outdated and replaced by newer versions. It is proposed to rather refer to standard numbers and imply that the current version accepted by the national accreditation body is applicable for all standards. This will avoid unnecessary amendments to the Act following the release of new versions of standards.

- Page 14: The paragraph on when notice must be given to WTO members does not seem accurate. According to the undertakings set out in the Understanding Regarding Notification, Consultation, Dispute Settlement and Surveillance adopted on 28 November 1979 (BISD 26S/210) under the WTO agreement, parties must notify all the issues below and not when there is a deviation from Regulations (and if so, that will be from internationally agreed regulations or measures):
 - Tariffs (including range and scope of bindings, GSP provisions, rates applied to members of free-trade areas/customs unions, other preferences);
 - Tariff quotas and surcharges;
 - Quantitative restrictions, including voluntary export restraints and orderly marketing arrangements affecting imports;
 - Other non-tariff measures such as licensing and mixing requirements, variable levies;
 - Customs valuation;
 - Rules of origin;
 - Government procurement;
 - Technical barriers;
 - Safeguard actions;
 - Anti-dumping actions;
 - Countervailing actions;
 - Export taxes;
 - Export subsidies, tax exemptions and concessionary export financing;
 - Free-trade zones, including in-bond manufacturing;
 - Export restrictions, including voluntary export restraints and orderly marketing arrangements;
 - Other government assistance, including subsidies, tax exemptions;
 - Role of state-trading enterprises;
 - Foreign exchange controls related to imports and exports;
 - Government-mandated countertrade; and
 - Any other measure covered by the Multilateral Trade Agreements in Annex 1A to the WTO Agreement.