



The Impact of Legal Metrology System in South Africa

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The Impact of Legal Metrology System in South Africa

Current globalization processes offers great opportunity:

- Range of goods and services either produced locally or imported
- All these require the establishment of laws and rules, standard, and technical regulations and the implementation of the mechanism needed for compliance.
- To succeed, a national system is required, that support quantity measurements within the legal framework of the country, that is a legal metrology system.

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What is Legal Metrology?

- Legal Metrology is the application of the practices involved in controlling measures to a wider range of measurements that affect consumers.
- A broader ambit would include for example measurements made for Regulatory purposes: speed control, blood alcohol content, Utility metering (i.e. water meter), Service metering (i.e. taximeter, telephone call timing), Medical measurements (blood pressure testing equipment, electrocardiographs), Environmental control (air emissions and noise monitoring).

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Current Status:

- Currently South Africa does not have a formal legal metrology system in that medical equipment, speed control measuring instruments and taxi meters among others, are not required by law to be verified, although to some extent it is expected that these instruments are calibrated for accuracy.

The current legislation (administered through the Trade Metrology Act, Act 77 of 1973) in South Africa addresses only the “**Trade Metrology**” activities and not the “**Legal Metrology**” activities as is the norm in other well established economies.

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What is Trade Metrology?

“Trade Metrology” is the system for controlling weights and measures, in respect of measuring instruments, of products and services, in South Africa it is regulated by the Trade Metrology Act, Act 77 of 1973. This system is aimed at protecting the consumer and creating a level playing field within which trade can take place. This Act is currently administered by the *National Regulator for Compulsory Specification* an organization which resides under the Department of Trade and Industry.

- Application of Trade Metrology focuses on pre-packaged goods, goods sold by mass, volume and length.

Now that we understand the difference between Legal and Trade Metrology, we can identify the gap.

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What impact will the introduction of Legal Metrology pose to the current system?:

Instruments whose measurements have a legal impact are not by law required to be verified.

The introduction of the revised trade metrology act to encompass the ambit of the legal metrology will result in **larger scope of measuring instruments** which needs to be verified for accuracy for either health purposes or safety. Another contributor towards the improvement of the economy.

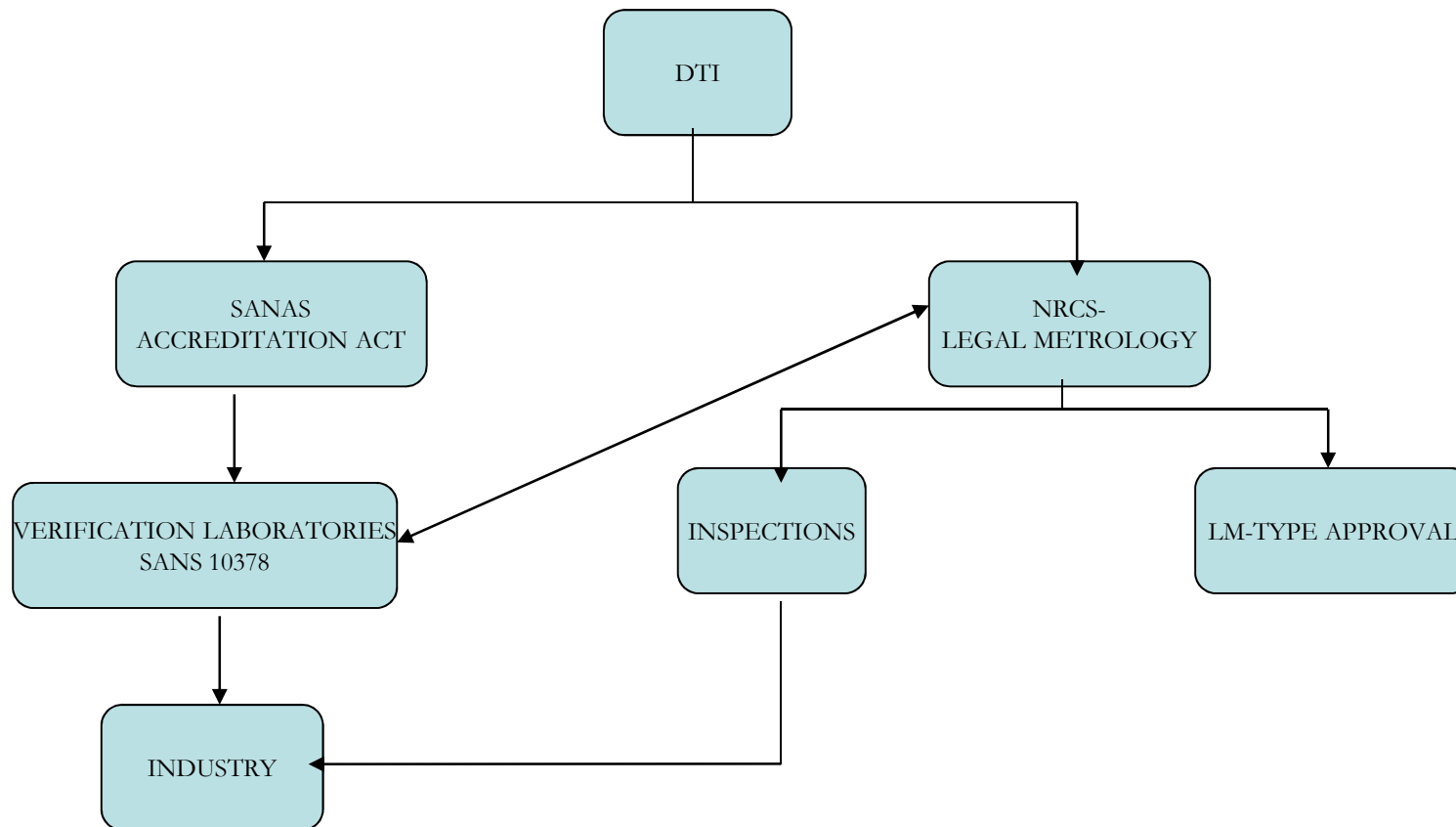
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Who are the critical role players in such a system?

- Department of Trade and Industry
- General Public
- SANAS (Accreditation body)
- Industry
- NRCS



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Current Projects:

Development of the Taximeter Standard

In anticipation of the 2010 FIFA Worldcup and the expected number of visitors, the Department of Transport saw a necessity for implementation of regulated taximeters.

How far are we with the development of std?

Final draft(SANS923) of Taxi meter standard is in place.

Future projects include Energy metering



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Focus on SANAS role:

Trade Metrology Act, Act 77 of 1973 requires that all Verification Laboratories be SANAS accredited.

Currently SANAS has accredited 162 verification laboratories in the field of mass, length and volume measuring instruments

How important is verification?

Verification is a preventive measure by which instruments are examined to see if they comply with the characteristics of the approved model and with prescribed error limits.

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Why is Legal metrology necessary?

- For thousands years back, the leaders of human groups have felt the need of establishing certain measurement standards and regulations for the use of resources of common interest.
 - History of Assyrians indicates how they brought about civilization to future generations.
 - Can you cope without knowing the time? Assyrians developed the system of time keeping.
 - dividing land into territories administered by local governors.
- Today when taking measurement, we do not worry about differences or fluctuations. Why? Because we have a stable system, internationally agreed upon, the **International System of Units, SI.**



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Why is legal metrology necessary? Continued..

- The current globalization processes are making available to all, in any country, a wide range of goods and services either produced locally or imported. As a result it becomes mandatory for all parties to use the same references, assign same meaning to measurements, agree on tolerances for raw materials and end products.
- At a personal level, legal metrology looks after the protection of consumers, contributing to a higher well-being and a better use of their buying power.
- Introduction of new technology because industry requires an increasingly higher precision. We can mention use of lasers and optical fibres and **navigation systems** using signals from satellites. Application of legal metrology can force producers to verify accuracy and their procedures.



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Control of pre-packaged products

- In Legal metrology, pre-packaged products, often called pre-packages are those products that are packed in packages of different types, forms and sizes and closed before they reach the consumer.
- Pre-packages must be clearly labelled with information on their contents in terms of quantities, whether mass, volume, length, area, or number of units.
- The packages must be so designed that they do not appear to contain more of the product than they really, a practice known as deceptive packaging.
- Verification of prepackages is gaining in importance. **Why?**
- Regulations concerning labelling of pre-packages specify requirements that at least the following items should appear:
 - the identity of product
 - the name and address of the manufacturer, packer, distributor or importer,
 - net quantity of product
- Applicable tolerances



Thank you!



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