

SANAS Zooms in on Proficiency Testing

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Why is Proficiency Testing Necessary?

For the international standards related to the laboratory accreditation, the necessity of the proficiency testing is prescribed as follows:

- The laboratory shall have quality control procedures for monitoring the validity of test and calibrations undertaken, ie. participation in inter-laboratory comparison or proficiency testing programmes (ISO/IEC 17025, Clause 5.9).
- The accreditation body shall ensure that its accredited laboratories participate in proficiency testing or other comparison programmes, where available and appropriate, and that corrective actions are carried out when necessary (ISO/IEC 17011, Clause 7.15.3).

What is the SANAS policy on PT?

All accredited testing laboratories are required to demonstrate validity of results. The options to satisfy this requirement are by participating in:

- An external Proficiency Testing Scheme operated in accordance with ISO/IEC Guide 43;
- An external Proficiency Testing Scheme not operated in accordance with ISO/IEC Guide 43;
- An inter-laboratory comparison scheme (where a number of laboratories are used);
- An intra-laboratory comparison scheme (where only one laboratory is used);
- Use of Certified Reference Materials.

SANAS maintains a register of national and international proficiency testing schemes. This register is available on the SANAS web page. The register contains

the details of the Proficiency Testing Schemes. It is the policy of SANAS that accredited testing laboratories preferably participate in those schemes that have been independently shown to comply with the requirements of ISO/IEC Guide 43. At this stage participation in other unaccredited schemes is acceptable until such time that there are sufficient accredited schemes in the various disciplines.

The frequency and extent of participation by an accredited laboratory in proficiency testing is such that each laboratory shall, where reasonably possible, participate in at least one scheme per year. The participation shall be in the field of expertise for which it performs the majority of work. Where necessary an STC is responsible for giving guidance within each field of expertise on the frequency and extent of participation by a laboratory. In the absence of any specific guidance by an STC, the laboratory itself shall decide on the frequency and extent of participation, subject to complying with the above. If, in the opinion of the assessor during an annual surveillance visit or during a re-assessment of the laboratory, its participation is considered to be insufficient, this shall be referred to SANAS for guidance.

In those fields of expertise where participation in proficiency schemes is economically viable, laboratories will be expected to show sufficient participation that would give reasonable confidence in their results. Failure to show reasonable participation could result in suspension

of accreditation. The STC shall decide what reasonable participation is in the case of a dispute.

Where can I get information on PT?

www.sanas.co.za - PT register and accredited PT schemes

www.eptis.bam.de - Database of PT providers

www.nla.org.za

www.ilac.org - ILAC G22 Guidance document on Proficiency Testing

www.iso.ch - ISO Guide 43-1 & 2 Proficiency testing by inter-laboratory comparisons

How can you help SANAS to list new PT providers?

If you come across local or international PT providers that you feel will be beneficial for use by the laboratory community, SANAS would most certainly consider them for listing on the SANAS website. Details can be submitted to the relevant SANAS field manager.

Recent events regarding participation in PT:

Four accredited laboratories were nominated by SANAS to participate in the APLAC T055 PT Scheme for Metals in Water. Results were submitted and SANAS is awaiting the final report from APLAC.

Available information

A document entitled 'Uncertainty of measurement in testing' QSOP 4i5, on estimation of measurement uncertainties in microbiological testing is available at www.evaluations-standards.org.uk. This document is not officially endorsed by SANAS. The intent is just to make laboratories aware of available information that they may use.