



## Legal Metrology Accreditation Scheme (LMAS)

### Background

The Legal Metrology Accreditation Scheme (LMAS) was established by SADCAS in February 2018. The LMAS is a multi-disciplinary accreditation scheme operated in accordance with ISO/IEC 17011: Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies.

### The Need for Accreditation

Metrology is defined as the science of measurement and Legal Metrology is the application of legal requirements to measurements and measuring instruments. Metrology is the cornerstone of any credible accreditation process. When we test or inspect, we measure. The accuracy and metrological traceability of these measurements is paramount and is influenced by the reliability of accredited calibration services and legal metrology conformity assessment services. Examples of legal metrology conformity assessment services are verification of measuring instruments, inspection goods offered for sale, type evaluation and certification of measuring instruments, certification persons and processes. For Legal Metrology Bodies concerned with demonstrating competence underpinned by a management system, the appropriate International Standards are ISO/IEC 17025, ISO/IEC 17020, ISO/IEC 17065 or ISO/IEC 17024 which specify the accreditation requirements depending on the nature of the conformity assessment services provided by the Legal Metrology Body.

Accreditation of legal metrology bodies in accordance with international standards provide a number of benefits:

- It assures accuracy, reliability, comparability and traceability of measurements;
- Is a means of demonstrating competence to clients and regulators;
- It increases confidence in certificates or reports issued;
- It limits product or system failure and down time;
- It helps control costs;
- It facilitates trade and economic growth;
- It is a credible and effective marketing tool;

- It provides assurance to all interested parties that regulations, criteria and prescribed procedures are consistently complied with; and
- It is a basis for the international recognition of the legal metrology body.

### Scopes of the Legal Metrology Accreditation Scheme (LMAS)

The main scopes of the legal metrology scheme are:

- Legal Metrology Verification;
- Legal Metrology Repair and Maintenance;
- Legal Metrology Inspection of Products for sale;
- Legal Metrology Quantity Control;
- Legal Metrology Type Testing;
- Legal Metrology OIML Certification Scheme;
- Legal Metrology Certification of Verifiers; and
- Legal Metrology Certification of Repairers.

The main scopes of LMAS are listed in SADCAS TG 03: Area of Accreditation. The sub-scopes pertaining to measuring instruments are categorized in accordance with the applicable metrology field as listed under the Legal Metrology Accreditation Scheme (LMAS), with each metrology field linked to the applicable OIML recommendation.

### The Accreditation Process

A Legal Metrology Body wishing to be accredited:

- Submits directly to SADCAS duly completed SADCAS F 43 (i): Application for accreditation of legal metrology bodies together with the laboratory quality manual or documented information, and duly completed SADCAS F 43 (f): Application for approval of personnel i.e. nominated representative and technical signatory in the case of verification bodies and SADCAS F 44: SADCAS accreditation agreement.
- Upon receipt, SADCAS undertakes a **completeness check** of the application documents.





- SADCAS provides the applicant with a detailed quotation based on the scope(s) of application. If acceptable, the applicant signs and returns duly signed quotation to SADCAS.
- SADCAS undertakes a **documentation review** of the applicant's quality manual and provides feedback to the applicant who, if there are nonconformities, institutes corrective action. If the quality manual addresses all the requirements of the standard then the application proceeds to the assessment stage.
- **Pre - assessments** are optional but may be compulsory depending on the regulator's condition for acceptance where required. Pre - assessment is an on-site visit to check the readiness of applicant for accreditation.
- An **initial assessment** of the organization's competence is undertaken on-site and involves an opening meeting, assessment, witnessing of selected technical activities and a closing meeting. Findings from the assessment are recorded as non-conformities where the laboratory needs to institute corrective action.

## Assessors

Assessors are experts from the public and private sectors as well as from Legal Metrology Bodies/technical institutions/associations in the SADC region who have been trained, qualified and registered as assessors by SADCAS. Assessors trained and qualified by other accreditation bodies and evaluated for competence can also undertake assessments on behalf of SADCAS. SADCAS engages Technical Experts where specialized expertise is required. An assessment is undertaken by an assessment team consisting of a Team Leader and at least one Technical Assessor/Technical Expert with expertise in the scope of assessment. The assessment team makes **recommendations for accreditation**.

## Accreditation Certificate

**Accreditation decision** is made by the Accreditation Approvals Committee based mainly on the information gathered during an

assessment. The accreditation certificate is valid for 5 years and renewed subject to terms and conditions of the LMAS.

## Periodic on-site assessments and Re-assessments

In order to maintain accreditation **periodic on-site assessments** are conducted. The first periodic on-site assessment is undertaken not more than 12 months after accreditation, thereafter annually throughout the accreditation cycle of 5 years.

**Re-assessments** are conducted at least 6 months before the end of the assessment cycle of 5 years.

The frequency of the periodic on-site assessments may be reduced subject to the outcome of a favourable risk assessment of the accredited Legal Metrology Body, but will not exceed two years.

## Appeals

Appeals from legal metrology bodies on an accreditation decision shall be in writing and shall be forwarded to the Chief Executive Officer within 3 months of the cause of appeal. Appeals are handled in accordance with SADCAS AP 08: Customer feedback handling procedure which maintains independency and impartiality.

## Accreditation Fees

SADCAS accreditation fees are contained in SADCAS AP 02: SADCAS service fees. The fees contained therein are estimates. Individual quotations are provided based on the fee estimates contained therein. SADCAS accreditation fees are reviewed annually.

## Accreditation Documents

SADCAS accreditation documents are available from the SADCAS website [www.sadcas.org](http://www.sadcas.org)



**For further information, please contact:**

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