

VLAC Policy for Traceability of Measurement

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Voluntary EMC Laboratory Accreditation Center Inc.

7F NOA Bldg. 2-3-5 Azabudai, Minato-ku, Tokyo 106-0041

1. Purpose and scope

This document provides the guidance and interpretation of traceability requirements in ISO/IEC17025:2017, JIS Q 17025:2018. This document is used for laboratories accredited by the VLAC and laboratories applying for accreditation.

2. Referenced documents

Following documents and standards are referred including the referenced documents

- (1) ISO/IEC Guide 99:2007 International vocabulary of metrology -- Basic and general concepts and associated terms (VIM)
- (2) ISO/IEC Guide 98-3:2008 Uncertainty of measurement -- Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)
- (3) 測定不確かさ評価の最前線.今井秀孝, 日本規格協会
- (4) ILAC P10:01/2020 ILAC Policy on Traceability of Measurement Results

3. Definition

3.1 Internal calibration

Calibration carried out by testing laboratory.

4. Basic concept

4.1 Achievement of traceability

Laboratories accredited by the VLAC and laboratories applying for accreditation to the Company shall establish measurement traceability Traceability will be achieved with apply following all of clauses.

- (1) It can be traced to the national, international, or recognized standards through an documented unbroken chain of comparisons.
- (2) The unbroken chain is achieved by use of SI units.
- (3) Uncertainty of measurement is evaluated in each stage of the comparison.
- (4) Appropriate method and operation procedure is used for the each comparison stage. Measurement result and measurement uncertainty is recorded.
- (5) The calibration laboratory or testing laboratory who perform internal calibration can show competence for execute the comparison stage.

4.2 Requirements for traceability of measurement for testing laboratories

4.2.1 Traceability to SI unit may be achieved by either of following calibrations.

- (1) Calibration by the national or international metrology institute
- (2) Calibration carried out by laboratory that's scope of calibration is accredited by APLAC or ILAC MRA member accreditation body. Calibration certificate with accreditation logo meets traceability requirements.
- (3) Calibration carried out by laboratory that is not accredited, internal calibration or calibration that is out-of-scope. In this case, all terms described 4.1 shall be verified.

4.2.2 Traceability shall be applied for following measurements.

- (1) Measurements on testing.
- (2) Measurements for equipment verification.
- (3) Measurements for settings of specific test condition.
- (4) Calibration of equipment.