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ACCREDITATION CRITERIA FOR TESTING LABORATORIES

AC89

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PREFACE

The attached accreditation criteria has been issued to provide all interested parties with guidelines on implementing performance features of the applicable standards referenced in the accreditation criteria. The criteria was developed and adopted following public hearings conducted by the International Accreditation Service, Inc. (IAS), Accreditation Committee and is effective on the date shown above. All accreditations issued or reissued on or after the effective date must comply with criteria. If the criteria is an updated version from a previous edition, solid vertical lines (**I**) in the outer margin within the criteria indicate a technical change or addition from the previous edition. Deletion indicators (➜) are provided in the outer margins where a paragraph or item has been deleted if the deletion resulted from a technical change. This criteria may be further revised as the need dictates.

IAS may consider alternate criteria provided the proponent submits substantiating data demonstrating that the alternate criteria are at least equivalent to the attached criteria and otherwise meet applicable accreditation requirements.

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ACCREDITATION CRITERIA FOR TESTING LABORATORIES

1.0 INTRODUCTION

1.1 Scope: The purpose of this criteria is to set forth requirements for obtaining and maintaining International Accreditation Service, Inc (IAS), testing laboratory accreditation and for the qualifying data that must be submitted relating to the scope of testing for which accreditation is sought. This criteria supplements the IAS Rules of Procedure for Laboratory Accreditation.

1.2 Reference Documents:

1.2.1 ANS/ISO/IEC (International Organization for Standardization/International Electrotechnical Commission) Standard 17025:2005, General Requirements for the Competence of Calibration and Testing Laboratories.

1.2.2 IAS Rules of Procedure for Laboratory Accreditation.

1.2.3 ISO/IEC Standard 17011, Conformity assessment—General requirements for accreditation bodies accrediting conformity assessment bodies.

1.2.4 IAS Calibration Laboratory Accreditation Program Definitions.

1.2.5 ILAC-P9:2005, ILAC Policy for Participation in National and International Proficiency Testing Activities.

2.0 BASIC INFORMATION

The following basic information is necessary:

2.1 Data showing compliance with the IAS Rules of Procedure for Laboratory Accreditation.

2.2 Data showing compliance with Section 4, Required Data, of this criteria.

3.0 DEFINITIONS

3.1 Laboratory: A body that calibrates and/or tests.

NOTES: In cases where a laboratory forms part of an organization that carries out other activities besides calibration and testing, the term “laboratory” refers only to those parts of that organization that are involved in the calibration and testing process. As used herein, the term “laboratory” refers to a body that carries out calibration or testing at or from a permanent location.

3.2 Calibration: The set of operations which establish, under specified conditions, the relationship between values indicated by a measuring instrument or measuring system, or values represented by a material measure, and the corresponding known values of a measurand.

3.3 Verification: A confirmation by examination and provision of evidence that specified requirements have been met.

3.4 Reference Standard: A standard, generally of the highest metrological quality available at a given location, from which measurements made at that location are derived.

3.5 Reference Material: A material or substance of which one or more properties are sufficiently well established to be used for the calibration of an apparatus, the assessment of a measurement method, or for assigning values to materials.

3.6 Certified Reference Material (CRM): A reference material one or more of whose property values are certified by a technically valid procedure, accompanied by or traceable to a certificate or other documentation which is issued by a certifying body.

3.7 Traceability: The property of a result of a measurement whereby it can be related to appropriate standards, generally international or national standards, through an unbroken chain of comparisons, with stated uncertainties at each step.

3.8 Proficiency Testing: A determination of the laboratory calibration or testing performance by means of interlaboratory comparisons.

3.9 Best Measurement Capability: Smallest uncertainty of measurement a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards intended to define, realize, conserve, or reproduce a unit of that quantity or one or more of its values; or when performing more or less routine calibrations of nearly ideal measuring instruments designed for the measurement of that quantity or one or more of its values.

4.0 REQUIRED DATA

4.1 The laboratory seeking accreditation must submit data showing compliance with ANS/ISO/IEC Standard 17025, General Requirements for the Competence of Calibration and Testing Laboratories.

4.2 The following policy on measurement traceability and calibration is supplemental to the requirements noted in ANS/ISO/IEC Standard 17025. Accredited testing laboratories are required to ensure traceability of their measurements (whenever such traceability is achievable) by obtaining calibration services either directly from a national laboratory, such as the National Institute of Standards and Technology (NIST), or from a calibration laboratory accredited under ANS/ISO/IEC Standard 17025 or verified as compliant to ANSI/NCSL Z540.3-2006. In all cases, bodies issuing accreditations to calibration laboratories must operate under ISO/IEC Standard 17011. Laboratories performing in-house calibrations are required to maintain the reference standards and equipment necessary to ensure traceability. The reference standards/equipment must be calibrated by an accredited calibration laboratory or by NIST. In cases in which calibration services are not available from an accredited laboratory as defined above, laboratories must be able to demonstrate the steps they take to ensure the quality and traceability of their calibration services. Calibration certificates must include the information required by ANS/ISO/IEC Standard 17025. Additionally, calibration certificates must state the estimated uncertainty of the calibration measurements.

4.3 Internal Calibration: Testing laboratories that perform internal calibrations must meet all applicable requirements of the IAS Laboratory Accreditation Program Policy Guide on Calibration and Traceability for the calibrations that are performed internally. Additionally, the following information must be provided or made available to IAS:

4.3.1 A list of equipment that is calibrated internally and the equipment used as the reference standard(s).

4.3.2 The specific procedures used for calibration of equipment.

4.3.3 The training records of personnel qualified to perform the internal calibration.

4.3.4 A scope that lists the disciplines and parameters of the internal calibration, including the Best Measurement Capability (BMC).

5.0 ASSESSMENT

5.1 Prior to accreditation, laboratories shall be subject to an on-site assessment by IAS. This assessment is to determine compliance with this criteria (AC89) and to evaluate expertise and equipment in the area(s) of testing where accreditation is sought.

5.2 After the initial year of accreditation, laboratories are subject to an on-site surveillance assessment. The surveillance assessment shall include review of at least the following: internal audit reports; minutes of management review meetings; results of proficiency testing, if any; any changes in key personnel, facilities and/or major test equipment; and information on any other significant changes in the quality system of the laboratory.

5.3 IAS will conduct an on-site reassessment or surveillance assessment of accredited laboratories at a minimum of once every two years, for verification of continued compliance with IAS accreditation requirements.

6.0 PROFICIENCY TESTING ACTIVITY

Proficiency testing activity shall be completed in accordance with ILAC-P9:2005. ■