16-313

NVLAP Request for Recognition

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Federal Communications Commission
Office of the Secretary

1) To: Chief of the Office of Engineering and Technology (OET)
Date: July 6, 2016

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2) **General Information**

a) Contact Information
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b) As set forth in Part 285 of Title 15 of the U.S. Code of Federal Regulations, the National Voluntary Laboratory Accreditation Program (NVLAP) accredits testing and calibration laboratories that are found competent to perform specific test or calibrations, or types of test or calibrations. NIST Handbook 150 presents the basic procedures under which NVLAP operates, and incorporates by reference the accreditation requirements of ISO/IEC 17025, and the handbook contains the general requirements that testing and calibration laboratories must meet if they wish to demonstrate that they operate an appropriate management system, are technically competent and are able to generate valid results.

NVLAP operates an accreditation system that is compliant with ISO/IEC 17011, which requires that the competence of applicant laboratories be assessed by the accreditation body against all of the requirements of ISO/IEC 17025. The managerial and technical requirements of ISO/IEC 17025

c) Accreditation to ISO/IEC 17025 for laboratories that test products subject to either the certification or Declaration of Conformity (DoC) approval procedure, that are located in countries that do not have a government-to-government MRA with the United States.

d) We are seeking recognition to accredit laboratories in the following non-MRA country: **People's Republic of China, Indonesia**

e) NVLAP has been providing accreditation to laboratories performing EMC testing located within China for more than 15 years. Also, NVLAP has received a request for accreditation for a test laboratory in Indonesia.

f) NVLAP currently has 46 accredited laboratories in China, of which 16 are accredited in the ECT program. The NVLAP process for addressing laboratory performance issues is detailed in NIST Handbook 150-2016, Sections 3.8-3.11, http://www.nist.gov/nvlap/upload/NIST-HB-150-2016.pdf.

3) Technical Qualifications

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List ABCDE

a) NVLAP is an approved signatory of the ILAC MRA, APLAC MRA and IAAC MRA.

NVLAP does not provide any services other than accreditation of testing and calibration laboratories.

NVLAP seeks balanced representation of interested parties in the operation of its accreditation programs through the transparency of activities and staff participation in professional societies, standards-writing bodies, and symposia.

NVLAP assessors, technical experts and headquarters staff are required to sign the NVLAP Declaration, by which they agree not to engage in any activities that might compromise their impartiality during any phase of the accreditation process. This declaration is designed to fulfill the impartiality requirements of ISO/IEC 17011: 4.3.4, 4.3.6, 6.1.4 and 7.5.3.

b) The NVLAP ECT Program for FCC test methods was established in October 1985 in response to a request from five private-sector testing laboratories. The purpose of the program was to formally recognize laboratories found competent to perform testing in accordance with Title 47 of the U.S. Code of Federal Regulations (CFR) Part 15-Radio Frequency Devices and 47 CFR Part 68-Connection of Terminal Equipment to the Telephone Network.

NVLAP currently accredits 96 laboratories in support of the FCC requirements.

c) NVLAP has a pool of 12 assessors that have a strong background in the accreditation process of EMC/Radio/Telecom testing laboratories. NVLAP conducts periodically training, with the most recent training event held in June 2016. **NVLAP requests that the attached Biosketches of the assessors be kept confidential.**

d) NVLAP has created an ECT program specific handbook, NIST Handbook 150-11, http://www.nist.gov/nvlap/upload/NIST-HB-150-11-2013.pdf, which requires the utilization of the NIST Handbook 150-11A (FCC Checklist) http://www.nist.gov/nvlap/upload/NIST-Handbook-150-11A-FCC-Checklist-2016-05-05.docxfor the review and documentation of the EMC test laboratory's capability. These requirements are used for the accreditation of U.S laboratories, as well as in use for the accreditation of the laboratories that have been accredited in countries outside of the United States.

NVLAP Response to FCC inquiries

1.Please confirm that this is the full list of countries that recognition is requested for. As the FCC will be drafting a public notice and putting the information about the request out for public comment, adding additional countries after the public notice goes out, may require the process to start from the beginning for the additional country recognitions.

NVLAP is seeking recognition to accredit laboratories in the following non-MRA countries: People's Republic of China, Indonesia, India, Philippines, Russia, Switzerland, Thailand, Ukraine

2.In the request submitted it is noted that all of the internet addresses provided in the request are invalid addresses. Please correct the addresses and also provide a PDF copy of each document to be provided in the public notice.

See ATTACHMENT (A2-1) NIST HB 150-2016

http://nvlpubs.nist.gov/nistpubs/hb/2016/NIST.HB.150-2016.pdf

See ATTACHMENT (A2-2) NIST HB 150-11-2013

https://www.nist.gov/sites/default/files/documents/nvlap/NIST-HB-150-11-2013.pdf

See ATTACHMENT (A2-3) NIST HB 150-11A FCC Checklist

https://www.nist.gov/document/nist-handbook-150-11a-fcc-checklist-2016-05-03docx

See ATTACHMENT (A2-4) NVLAP Application Form

https://www.nist.gov/file/305161

3.In the request for recognition it is noted that the information about the assessors has been removed. The names of the assessors and a brief description of their applicable experience will need to be provided for the public notice. The full bio or resume is not required.

See ATTACHMENT (A3) AssessorBio_Short

4.The information provided indicates that there are twelve assessors but information is only provided for eleven. Please identify the additional assessor that may be doing assessments in the identified countries.

See ATTACHMENT (A4) AssessorBio_Cantwell_Long

5.The information provided addresses the ILAC Cross Frontier Accreditation Principles for Cooperation. Please provide more information as to how you would work within the cross frontiers principles for each of the requested countries that already have accreditation bodies. It is possible the test firm accrediting bodies in some of the countries identified in this request will apply to the FCC and become recognized to assess testing laboratories in their own countries. Please clarify how this would be handled if this were to occur and if it is addressed in your procedures.

NVLAP would follow a similar transition process that is being developed for when an MRA becomes operational in those countries, by notifying the accredited laboratories and working in cooperation with the test firm accrediting body to transition the designation of the lab to them.

6.As the FCC recognition is only for Non-MRA countries, please provide procedures that address what steps will need to be taken to transition to an MRA if an MRA becomes operational with any of the recognized countries. Note that if an MRA becomes operational, new accredited testing laboratories will have to be designated to the FCC under the MRA. Testing laboratories already recognized will be required to transition to operation under the MRA. Also, note when a new MRA becomes operational, it is up to the foreign MRA partner as to whether they will accept assessment reports from assessment bodies outside their territory.

A procedure to address the steps that will be taken to transition accredited recognized labs to an MRA process is being developed and we are working to incorporate it into either the management system for a program specific section or under the program specific handbook. In the interim, we have attached the draft procedure for review.

See ATTACHMENT (A6) Draft procedure for the Transition of a Laboratory

7.The information submitted in the request indicates that NVLAP is an approved signatory of ILAC, APLAC and IAAC. Please provide the documents that verify this.
See ATTACHMENT (A7) NVLAP APLAC, IAAC and ILAC Signatory

8.Section A.7 of NIST Handbook 150-2016 addresses subcontracting. Please explain how this subcontracting policy is applied to the FCC policies and procedures.
Please note that NVLAP applies the term subcontracting to any testing that a lab is accredited to perform, yet chooses, for whatever reason, to have another test lab perform the testing. Based on that, ANNEX A.7 addresses how a NVLAP accredited lab references their accreditation when the report contains some test data from a subcontractor. If the subcontracted laboratory is accredited by NVLAP, its NVLAP lab code should be stated.

If the subcontracted laboratory is accredited by a body other than NVLAP, then the name of the accreditation body and the laboratory's number or other unique identifier shall also be stated. NVLAP uses ISO/IEC 17025, Section 4.4.1 to assess that the test labs are meeting the requirements of their customers. Also, they are assessed against Section 4.5.1 which requires that the work be placed with a competent subcontractor. In this case, a competent subcontractor would be one that is accredited and recognized by the FCC.

9.Please explain or provide the procedures for how testing laboratories with branch or satellite facilities are evaluated and the requirements that they must meet.
For testing laboratories that perform testing at locations other than the primary facility covered under the accreditation, these facilities are required to be reviewed during the on-site, and will be reviewed on a case-by-case basis to determine the extent of the on-site review.
See ATTACHMENT (A2-1) NIST HB 150-2016, Sections 1.5.3, 3.2.3.4, 3.3.1.3
See ATTACHMENT (A2-2) NIST HB 150-11-2013, Section 3.3.1.2

10.It doesn't appear that the procedures provided address how language differences are handled at assessments where English may not be the language spoken. Please provide the NVLAP procedures related to how assessments are handled when there is a language difference.
See ATTACHMENT (A2-1) NIST HB 150-2016 Annex D.1.1
During an on-site assessment, if the laboratory personnel do not speak English, the laboratory shall provide an interpreter(s), subject to NVLAP approval. The interpreter(s) will assist the assessor(s) with conversing directly with laboratory management and technical staff and with reviewing laboratory documentation.

11.Please clarify where the procedures identify there-assessment cycle/period for assessed laboratories and what that period is.
See ATTACHMENT (A11) NVLAP Management System Manual, Annex G
Annex G identifies the laboratory accreditation period is valid for one year, and NVLAP conducts full reassessments at intervals not exceeding 2 years.

12.The request submitted indicates that NVLAP currently accredits 96 laboratories in support of the FCC program. Please specify the number testing laboratories by the country in which they are located and provide that information. The individual test laboratory names do not need to be provided.
NVLAP has accredited two additional organizations in support of the FCC program since the original submission, so there is now a total of 98 labs. The following is the breakdown of the number of labs by country:
US- 47
Canada- 3
China- 16
Japan- 20
Korea- 2
Taiwan- 10

NIST HB 150-2016

National Voluntary Laboratory Accreditation Program

Procedures and General Requirements

Warren R. Merkel
Vanda R. White

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NIST
National Institute of Standards and Technology
U.S. Department of Commerce

NIST HB 150-2016

National Voluntary Laboratory Accreditation Program

Procedures and General Requirements

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July 2016

U.S. Department of Commerce
Penny Pritzker, Secretary

National Institute of Standards and Technology
Willie May, Under Secretary of Commerce for Standards and Technology and Director

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Foreword

The NIST Handbook 150 publication series sets forth the procedures, requirements, and guidance for the accreditation of testing and calibration laboratories by the National Voluntary Laboratory Accreditation Program (NVLAP). The series is comprised of the following publications:

- NIST Handbook 150, *NVLAP Procedures and General Requirements*, which contains the general procedures and requirements under which NVLAP operates as an unbiased third-party accreditation body;

- NIST Handbook 150-xx program-specific handbooks, which supplement NIST Handbook 150 by providing additional requirements, guidance, and interpretive information applicable to specific NVLAP laboratory accreditation programs (LAPs).

The 2016 edition of NIST Handbook 150 supersedes and replaces the 2006 edition. There are no changes to the technical requirements for accreditation.

In addition to a number of editorial revisions, the following main changes have been made with respect to the previous edition of the handbook:

- incorporation of previously issued NVLAP Policy Guides and updated definitions and references;

- addition of Annex E, which contains the requirements for accredited laboratories wishing to use the Accredited Laboratory Combined ILAC MRA Mark;

- removal of the managerial and technical requirements of ISO/IEC 17025, which were previously contained in NIST Handbook 150 clauses 4 and 5, respectively.

The last item reflects NVLAP's decision to require applicant laboratories to have an official copy of ISO/IEC 17025 in order to proceed with the accreditation process (see the new clause 4 for additional information).

Annexes A through E form a normative part of this handbook, meaning they contain provisions that laboratories must meet in order to conform to the requirements for accreditation. This handbook is available on the NVLAP website (http://www.nist.gov/nvlap) and on request from NVLAP.

Questions or comments concerning this handbook should be submitted to NVLAP, National Institute of Standards and Technology, 100 Bureau Drive, Stop 2140, Gaithersburg, MD, 20899-2140; phone: 301-975-4016; fax: 301-926-2884; e-mail: nvlap@nist.gov.

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Introduction

As set forth in Part 285 of Title 15 of the U.S. Code of Federal Regulations, the National Voluntary Laboratory Accreditation Program (NVLAP) accredits testing and calibration laboratories that are found competent to perform specific tests or calibrations, or types of tests or calibrations. NIST Handbook 150 presents the basic procedures under which NVLAP operates, and incorporates by reference the accreditation requirements of ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories.* ISO/IEC 17025 and this handbook contain the general requirements that testing and calibration laboratories must meet if they wish to demonstrate that they operate an appropriate management system, are technically competent, and are able to generate technically valid results.

NVLAP operates an accreditation system that conforms to ISO/IEC 17011, *Conformity assessment—General requirements for accreditation bodies accrediting conformity assessment bodies*, which requires that the competence of applicant laboratories be assessed by the accreditation body against the requirements of ISO/IEC 17025.

Growth in the use of management systems generally has increased the need to ensure that laboratories that form part of larger organizations or offer other services can operate to a quality management system that is seen as compliant with ISO 9001, as well as with ISO/IEC 17025. Care was taken by the ISO Committee on Conformity Assessment (CASCO) to incorporate all those requirements of ISO 9001 that are relevant to the scope of testing and calibration services that are covered by the laboratory's management system. Testing and calibration laboratories that comply with the requirements of this handbook will, therefore, also operate in accordance with the principles of ISO 9001, as stated in the introduction of ISO/IEC 17025.

NVLAP has entered into mutual recognition arrangements (MRAs) with equivalent accreditation bodies that comply with ISO/IEC 17011 and applicable MRA documents. The use of this handbook will promote cooperation among laboratories and other bodies, and assist in the exchange of information and experience and in the harmonization of standards and procedures. This should, in turn, facilitate the acceptance of testing and calibration results among economies worldwide.

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1 General information

1.1 Purpose and scope

1.1.1 NIST Handbook 150 sets forth the procedures and general requirements under which the National Voluntary Laboratory Accreditation Program (NVLAP) operates as an unbiased third party to accredit both testing and calibration laboratories.

1.1.2 The NIST Handbook 150-xx series program-specific handbooks supplement the requirements in NIST Handbook 150 by providing additional requirements, guidance, and interpretive information applicable to specific NVLAP laboratory accreditation programs (LAPs).

1.1.3 This handbook is for use by laboratories in developing the management and technical systems that govern their operations. Laboratory customers, regulatory authorities, and accreditation bodies may also use it as a basis upon which to judge the competence of laboratories.

1.1.4 If a testing or calibration laboratory fulfills the requirements of this handbook, it meets both the technical competence requirements and the management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations.

1.1.5 Compliance with regulatory and safety requirements for the operation of laboratories is not addressed by this handbook. Such requirements may be addressed, if appropriate, in the NIST Handbook 150-xx series of program-specific handbooks (see Clause 4).

1.2 Organization of handbook

1.2.1 Clause 1 of this handbook describes considerations that relate in general to all aspects of NVLAP. Clause 2 describes how LAPs are requested, developed, announced, modified, and terminated. Clause 3 contains the procedures that define the accreditation process, including arrangements for granting, maintaining, extending, reducing, suspending, and withdrawing accreditation. Annexes A through E present requirements for referencing NVLAP accreditation and achieving traceability, conditions for NVLAP accreditation, information and requirements for laboratories located outside the United States, and rules for use of the Accredited Laboratory Combined ILAC MRA Mark.

1.2.2 The word *shall* is used throughout NVLAP's documents and describes mandatory requirements for accreditation. The word *should* is used where guidance is provided but does not preclude other acceptable practices.

1.2.3 A note (shown as NOTE in a smaller font) contains additional information intended to assist the understanding or use of the document. Notes may provide clarification of the text, examples, and guidance; they do not contain requirements.

1.3 Program description

1.3.1 The National Voluntary Laboratory Accreditation Program (NVLAP) is a U.S. Government entity administered by the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce.

1.3.2 NVLAP is a voluntary system that provides a mechanism for the recognition of testing and calibration laboratories based on internationally accepted standards. It identifies competent laboratories

for use by regulatory agencies, purchasing authorities, and product certification systems, and promotes the acceptance of test and calibration results among economies and accreditors to support trade facilitation activities worldwide.

1.3.3 LAPs are established on the basis of requests and demonstrated need. The specific tests or calibrations, types of tests or calibrations, or standards to be included in a LAP are determined by an open process during the development of the LAP (see Clause 2). NVLAP does not unilaterally propose or decide the scope of a LAP.

1.3.4 NVLAP administers its policies and procedures in a nondiscriminatory manner. Access to NVLAP accreditation is not conditional on the size of a laboratory or on its membership in any association or group, nor is it conditional upon the number of laboratories already accredited. NVLAP's accreditation services are available to public and private testing and calibration laboratories, including commercial laboratories, manufacturers' in-house laboratories, university laboratories, and federal, state, and local government laboratories.

1.3.5 NVLAP accreditation is based on evaluation of a laboratory's management and technical competence for conducting specific tests or calibrations. Accreditation is granted only after thorough evaluation of an applicant has demonstrated that all NVLAP requirements have been fulfilled. Fulfillment of requirements is acknowledged by the issuance of a Certificate of Accreditation and a Scope of Accreditation, which details the specific test methods, calibration parameters, or services for which a laboratory has been accredited.

1.3.6 NVLAP operates a management system that meets the requirements of ISO/IEC 17011.

1.3.7 NVLAP accreditation does not relieve a laboratory from complying with applicable federal, state, and local laws and regulations.

1.4 References

The following documents are referenced in this handbook. For undated references, the latest revision applies. When a specific clause(s) of a document is cited, the date of the referenced document is included.

— BIPM/IEC/IFCC/ISO/IUPAC/IUPAP/OIML, *Guide to the Expression of Uncertainty in Measurement* (GUM)

— BIPM/IEC/IFCC/ISO/IUPAC/IUPAP/OIML, *International Vocabulary of Basic and General Terms in Metrology* (VIM)

— ILAC-G21, *Cross-Frontier Accreditation—Principles for Cooperation*

— ILAC-P10:01/2013, *ILAC Policy on Traceability of Measurement Results*

— ILAC-P14, *ILAC Policy ILAC Policy for Uncertainty in Calibration*

— ILAC-R7:05/2015, *Rules for the Use of the ILAC MRA Mark*

— ISO 9000:2015, *Quality management systems—Fundamentals and vocabulary*

— ISO 9001, *Quality management systems—Requirements*

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— ISO/IEC 17000:2004, *Conformity assessment—Vocabulary and general principles*

— ISO/IEC 17011, *Conformity assessment—General requirements for accreditation bodies accrediting conformity assessment bodies*

— ISO/IEC 17025:2005, *General requirements for the competence of testing and calibration laboratories*

— ISO/IEC 17043:2010, *Conformity assessment—General requirements for proficiency testing*

— ISO/IEC Guide 2:2004, *Standardization and related activities—General vocabulary*

1.5 Terms and definitions

For the purposes of this handbook, the relevant terms and definitions given in ISO/IEC 17000 and the VIM apply.

NOTE General definitions related to quality are given in ISO 9000, whereas ISO/IEC 17000 gives definitions specifically related to certification and laboratory accreditation. Where different definitions are given in ISO 9000, the definitions in ISO/IEC 17000 and the VIM are used.

1.5.1
accreditation
Formal recognition that a laboratory is competent to carry out specific tests or calibrations or types of tests or calibrations.

1.5.2
Approved Signatory
An individual who is designated by a laboratory and deemed competent by NVLAP to sign accredited laboratory test or calibration reports. An Approved Signatory is responsible for the technical content of the report and is the contact person for questions or problems with the report. Approved Signatories have responsibility, authority and technical capability within the organization for the results produced.

NOTE See ISO/IEC 17025, 5.2.5, and 5.10.2 j).

1.5.3
assessment, on-site
Systematic, independent, documented process for determining laboratory competence and for obtaining records, statements of fact or other relevant information by NVLAP assessors at the laboratory facilities and other places where test or calibration services are provided with the objective of determining the extent to which NVLAP requirements are fulfilled.

NOTE FROM ISO/IEC 17000:2004: Whilst "audit" applies to management systems, "assessment" applies to conformity assessment bodies as well as more generally.

1.5.4
Authorized Representative
Individual who is authorized by laboratory top management to commit the laboratory to fulfill the NVLAP conditions for accreditation (see Annex C). The Authorized Representative reports to NVLAP changes that may affect the laboratory's capability, scope of accreditation, or compliance with accreditation requirements.

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1.5.5
Certificate of Accreditation
Document issued by NVLAP to a laboratory that has been granted NVLAP accreditation. A Certificate of Accreditation is always issued with a Scope of Accreditation. (See also **Scope of Accreditation**.)

1.5.6
competence
Ability of a laboratory to conduct tests and perform calibrations in accordance with the specified standards and to produce accurate, proper, fit for purpose, technically valid data and test and calibration results.

1.5.7
customer
Any person or organization that engages the services of a testing or calibration laboratory.

1.5.8
interlaboratory comparisons
Organization, performance and evaluation of measurements or tests on the same or similar items by two or more laboratories in accordance with predetermined conditions.

NOTE In some circumstances, one of the laboratories involved in the intercomparison may be the laboratory that provided the assigned value for the test item.

[ISO/IEC 17043:2010, 3.4]

1.5.9
laboratory
Organization that performs tests and/or calibrations. When a laboratory is part of an organization that carries out activities additional to testing and calibration, the term *laboratory* refers only to those parts of that organization that are involved in the testing and calibration process. A laboratory's activities may be carried out at a permanent, temporary, or remote location.

NVLAP further defines laboratory as being a physical entity—that is, a testing or calibration facility that is separate and apart physically from any other laboratory whether or not sharing common ownership, management, or quality systems with any other laboratory(s).

1.5.10
LAP
Laboratory Accreditation Program established and administered under NVLAP, consisting of test methods or calibrations relating to specific products or fields of testing or calibration.

1.5.11
management system
Set of interrelated or interacting elements of an organization to establish policies and objectives, and processes to achieve those objectives.

[ISO 9000:2015, 3.5.3]

NOTE A management system of an organization may include different management systems, such as a **quality management system**, a financial management system, or an environmental management system.

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1.5.12
measurement assurance
Process to ensure adequate measurement results that may include, but is not limited to: 1) use of good experimental design principles so that the entire measurement process, its components, and relevant influence factors can be well-characterized, monitored, and controlled; 2) complete experimental characterization of the measurement process uncertainty including statistical variations, contributions from all known or suspected influence factors, imported uncertainties, and the propagation of uncertainties throughout the measurement process; and 3) continuously monitoring the performance and state of statistical control of the measurement process with proven statistical process control techniques including the measurement of well-characterized check standards along with the normal workload and the use of appropriate control charts.

1.5.13
measurement uncertainty
uncertainty of measurement
uncertainty
Non-negative parameter characterizing the dispersion of the quantity values being attributed to a measurand, based on the information used.

NOTE 1 Measurement uncertainty includes components arising from systematic effects, such as components associated with corrections and the assigned quantity values of measurement standards, as well as the definitional uncertainty. Sometimes estimated systematic effects are not corrected for but, instead, associated measurement uncertainty components are incorporated.

NOTE 2 The parameter may be, for example, a standard deviation called standard measurement uncertainty (or a specified multiple of it), or the half-width of an interval, having a stated coverage probability.

NOTE 3 Measurement uncertainty comprises, in general, many components. Some of these may be evaluated by Type A evaluation of measurement uncertainty from the statistical distribution of the quantity values from series of measurements and can be characterized by standard deviations. The other components, which may be evaluated by Type B evaluation of measurement uncertainty, can also be characterized by standard deviations, evaluated from probability density functions based on experience or other information.

NOTE 4 In general, for a given set of information, it is understood that the measurement uncertainty is associated with a stated quantity value attributed to the measurand. A modification of this value results in a modification of the associated uncertainty.

[JCGM 200:2012 2.26]

1.5.14
metrological traceability
Property of a measurement result whereby the result can be related to a reference through a documented unbroken chain of calibrations, each contributing to the measurement uncertainty.

[JCGM 200:2012 2.41]

NOTE: The abbreviated term "traceability" is sometimes used to mean 'metrological traceability' as well as other concepts, such as 'sample traceability' or 'document traceability' or 'instrument traceability' or 'material traceability', where the history ("trace") of an item is meant. Therefore, the full term of "metrological traceability" is preferred if there is any risk of confusion.

[NOTE 8 from JCGM 200:2015 2.41]

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1.5.15
nonconformity
Nonfulfillment of NVLAP requirements for accreditation.

1.5.16
NVLAP Lab Code
Unique numeric identifier that is assigned by NVLAP to each laboratory and used for identification, record-keeping, and database management. (See also Annex A.)

1.5.17
NVLAP logo
The graphic version of the NVLAP acronym. Use of the NVLAP logo alone is reserved for NVLAP. Accredited laboratories are permitted to use the NVLAP logo only as part of the NVLAP symbol. (See also **NVLAP symbol** and Annex A.)

1.5.18
NVLAP symbol
The NVLAP logo combined with the NVLAP Lab Code and type of accreditation activity (testing or calibration). The NVLAP symbol is the graphical representation that an accredited laboratory is permitted to use in referencing its accredited status. (See also **NVLAP logo** and Annex A.)

1.5.19
objective evidence
Data supporting the existence or verity of something.

[ISO 9000:2015, 3.8.3]

NOTE Objective evidence may be obtained through observation, measurement, test, or other means.

1.5.20
proficiency testing
Evaluation of participant performance against pre-established criteria by means of interlaboratory comparisons.

NOTE 1 For the purposes of this International Standard, the term "proficiency testing" is taken in its widest sense and includes, but is not limited to:

a) quantitative scheme — where the objective is to quantify one or more measurands of the proficiency test item;

b) qualitative scheme — where the objective is to identify or describe one or more characteristics of the proficiency test item;

c) sequential scheme — where one or more proficiency test items are distributed sequentially for testing or measurement and returned to the proficiency testing provider at intervals;

d) simultaneous scheme — where proficiency test items are distributed for concurrent testing or measurement within a defined time period;

e) single occasion exercise — where proficiency test items are provided on a single occasion;

f) continuous scheme — where proficiency test items are provided at regular intervals;

g) sampling — where samples are taken for subsequent analysis; and

h) data transformation and interpretation — where sets of data or other information are furnished and the information is processed to provide an interpretation (or other outcome).

[ISO/IEC 17043:2010, 3.7]

1.5.21
quality management system
Part of a management system with regard to quality.

[ISO 9000:2015, 3.5.4]

1.5.22
quality manual
Specification for the quality management system of an organization.

NOTE 1 to entry: Quality manuals can vary in detail and format to suit the size and complexity of an individual *organization.*

[ISO 9000:2015, 3.8.8]

1.5.23
requirement
Provision that conveys criteria to be fulfilled.

[ISO/IEC Guide 2:2004, 7.5]

NOTE NVLAP requirements are mandatory and must be fulfilled to achieve and maintain accreditation. NVLAP requirements are contained in NIST Handbook 150, NIST Handbook 150-xx series, NVLAP Policy Guides, and NVLAP Laboratory Bulletins.

1.5.24
revocation
Removal of the accredited status of a laboratory if the laboratory is found to have violated the conditions for accreditation.

1.5.25
Scope of Accreditation
Document issued by NVLAP to a laboratory that has been granted NVLAP accreditation. The Scope of Accreditation lists the test methods or services, or calibration services, for which the laboratory is accredited. (See also **Certificate of Accreditation**.)

1.5.26
suspension
Temporary removal by NVLAP of the accredited status of a laboratory for all or part of its scope of accreditation when it is determined (by the laboratory or by NVLAP) that the laboratory does not meet the conditions for accreditation.

1.5.27
test method
Defined technical procedure to determine one or more specified characteristics of a material or product.

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1.6 NVLAP information

NVLAP makes publicly available the following information through its website, http://www.nist.gov/nvlap:

a) a description of the NVLAP program and the fields of accreditation offered by NVLAP;

b) the documents that set out the requirements for accreditation, including NIST Handbook 150, the NIST Handbook 150-series of program-specific handbooks, and their associated guides and bulletins (see also Clause 4);

c) information about the assessment and accreditation processes;

d) information about suitable ways to obtain traceability of measurement results in relation to the scope for which accreditation is provided;

e) the NVLAP fee policy and schedule;

f) a directory of NVLAP-accredited laboratories, which includes the name and address, accreditation effective and expiration dates, and scope of accreditation of each accredited laboratory;

g) information about mutual recognition arrangements to which NVLAP is a signatory;

h) an analysis of NVLAP's relationship with related bodies (including NIST);

i) various publications and forms for the use and benefit of accredited laboratories, NVLAP assessors and technical experts, and other interested parties.

1.7 Confidentiality

1.7.1 To the extent permitted by applicable laws, NVLAP will protect the confidentiality of all information obtained relating to the application, on-site assessment, proficiency testing, evaluation, and accreditation of laboratories.

1.7.2 In addition, NVLAP and the laboratory seeking accreditation acknowledge and agree that the accreditation assessments and proficiency testing activities conducted by NVLAP are done in accordance with the authority granted to NIST by Title 15 United States Code Section 3710a. NVLAP and the laboratory further agree that to the extent permitted by law, NIST will protect information obtained during application, on-site assessment, proficiency testing, evaluation, and accreditation from disclosure pursuant to Title 15 USC 3710a(c)(7)(A) and (7)(B) for a period of five years after it is obtained.

1.7.3 For the first five years that laboratory information is held by NVLAP, the provisions of 1.7.1 and 1.7.2 will be in force. Information in NVLAP's possession for more than five years will continue to be held in confidence under the provisions of 1.7.1.

1.8 Referencing NVLAP accreditation

1.8.1 The term *NVLAP* and the NVLAP logo are registered marks of the Federal Government, which retains exclusive rights to control the use thereof. Permission to use the term and symbol (see 1.5.18) is granted to NVLAP-accredited laboratories for the limited purpose of announcing their accredited status,

and for use on reports that describe only testing or calibration within the scope of accreditation. NVLAP reserves the right to control the quality of the use of the NVLAP term, logo, and symbol.

1.8.2 NVLAP's policy is to control the use of the term and symbol and to ensure that accredited laboratories express their accredited status in a manner that is clear and accurate, and not misleading. This policy applies to test and calibration reports, letterheads, contracts, business cards, brochures, advertising, websites, and any other use not specified herein.

1.8.3 NVLAP-accredited laboratories are authorized to use the term *NVLAP* and the NVLAP symbol to reference their accredited status, subject to the conditions presented in Annex A. Failure to comply with the conditions may result in suspension or revocation of a laboratory's accreditation.

1.8.4 Use of the term or logo by other persons and organizations shall be authorized in writing by NVLAP on a case-by-case basis.

1.8.5 Use of the term and symbol by a laboratory whose status is suspended, revoked, or voluntarily terminated is specified in 3.10, 3.11, and 3.12.

1.8.6 NVLAP has established procedures for taking suitable action to deal with incorrect references to accreditation status or misleading use of accreditation symbols.

1.9 Mutual recognition

1.9.1 NVLAP maintains signatory member status in several Mutual Recognition Arrangements (MRAs), including the International Laboratory Accreditation Cooperation (ILAC) MRA. MRAs serve to demonstrate the equivalence of the operation of signatory member accreditation bodies. As a consequence, the competence (within the accredited scopes) of laboratories accredited by these bodies is demonstrated and recognized by all signatory accreditation bodies. Through MRAs, NVLAP actively promotes the worldwide acceptance of test reports and calibration certificates from NVLAP-accredited laboratories. Links to the texts of the MRAs are given on the NVLAP website.

1.9.2 As a signatory to the ILAC MRA, NVLAP meets the requirements of ISO/IEC 17011, and specific supplementary MRA requirements. In accordance with the MRA, NVLAP-accredited laboratories meet the requirements of ISO/IEC 17025.

1.9.3 NVLAP may establish and develop special programs in response to requests from government agencies where it has been determined that the subject of accreditation is inherently a government function. Some of these programs may not be covered by or subject to the requirements of any MRA. NVLAP will clearly identify such programs.

1.10 Accreditation of laboratories located outside of the United States

NVLAP has established policies and requirements for accreditation of laboratories located outside the United States (see Annex D). These policies include the NVLAP commitment to abide by its mutual recognition arrangement obligations concerning cross-frontier accreditation activities.

1.11 Complaints

NVLAP employs a formal system to address complaints, which includes procedures for determining the validity of complaints, taking appropriate and effective actions, responding to complainants, and record-keeping. Any person or organization may lodge a complaint regarding the activities of NVLAP or of a

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NVLAP-accredited laboratory by sending a description of the complaint and supporting documentation to NVLAP. A complaint concerning a NVLAP-accredited laboratory should first be addressed by the laboratory against which the complaint is lodged.

2 LAP establishment, development and implementation

2.1 Bases for establishment

2.1.1 General

NVLAP establishes LAPs in response to legislative or administrative actions, or to requests from private sector entities or government agencies.

2.1.2 LAPs established through legislative or administrative actions

Upon receipt of a mandate for a LAP based on legislative or administrative action, NVLAP publishes a *Federal Register* notice stating the purpose and general scope of the LAP and identifying government agencies having oversight. The notice provides information to any interested party wishing to receive routine information on the development of the LAP.

2.1.3 LAPs established by request

2.1.3.1 A request to establish a LAP must be made in writing to the Chief of NVLAP. Each request must include:

a) the scope of the LAP in terms of services proposed for inclusion;

b) specific identification of the applicable standards or test methods, including appropriate designations, and the organizations having responsibility for them;

c) a statement of the perceived need for the LAP;

d) an estimate of the anticipated demand for the program, including the number of laboratories that are likely to seek accreditation and the number and nature of the users of such laboratories;

e) a statement of the extent to which the requestor will support necessary developmental aspects of the LAP with funding and personnel.

2.1.3.2 If the requestor is a federal, state, or local government agency, then the request should also include a description of the procedures followed or a citation of the specific authority used to identify a need for the LAP. For state and local government agencies, the request should also include a statement explaining why the LAP should be of national scope.

2.1.3.3 If the requestor is a private sector entity, then the request should also include a description of the process by which the request was developed (e.g., public meetings representing a balance of interests or input from interested parties).

2.1.3.4 NVLAP may request clarification of the information submitted in the request.

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2.1.3.5 The Chief of NVLAP analyzes the request and any supporting information received, and after consultation with interested parties through public workshops or other means to ensure open participation, determines if there is need for the requested LAP.

2.1.3.6 The Chief of NVLAP decides whether or not to develop the LAP, taking into consideration the demonstrated need or available resources.

2.1.3.7 The Chief of NVLAP informs the requestor and other interested parties of the LAP decision.

2.2 Development of technical requirements

2.2.1 Technical requirements for accreditation are specific for each LAP. They tailor the general requirements for accreditation to the services covered by the LAP.

2.2.2 NVLAP develops the technical requirements based on relevant and impartial expert advice, ensuring that all interested parties have the opportunity for effective involvement. This advice may be obtained directly through public workshops or other suitable means.

2.2.3 When NVLAP organizes workshops or other means of collecting input, it provides the opportunity for all interested parties to attend and/or respond. One means typically used is announcing such activities in the *Federal Register*. A summary of each workshop is prepared and made available upon request.

2.2.4 When any part of the development of technical requirements is sponsored or undertaken by another organization, NVLAP ensures that the same conditions for balanced representation and participation are fulfilled.

2.2.5 NVLAP communicates and consults with appropriate officials from those federal agencies that may have an interest in and may be affected by established LAPs, facilitating their effective and meaningful cooperation, input, and participation.

2.3 Announcing the establishment of a LAP

When NVLAP has completed the development of the technical requirements, it announces the establishment of the LAP, advising laboratories how to apply for accreditation.

2.4 Adding to or modifying a LAP

2.4.1 A LAP may be added to, modified, or realigned based on either a written request or a need identified by NVLAP. Any person wishing to add or delete specific tests or calibrations, types of tests or calibrations, or standards may submit a request to NVLAP.

2.4.2 NVLAP may choose to make additions or modifications available for accreditation in a LAP when:

a) the additional tests or calibrations, types of tests or calibrations, or standards requested are directly relevant to the LAP;

b) it is feasible and practical to accredit testing or calibration laboratories for the additional tests or calibrations, types of tests or calibrations, or standards;

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c) it is likely that laboratories will seek accreditation for the additional tests or calibrations, types of tests or calibrations, or standards.

2.4.3 The process for modifying a LAP depends on the nature of the modification. Significant changes to a LAP may be subject to a process similar to that described in 2.2. Minor changes (e.g., addition of methods for technologies already included in a LAP) may be handled in a less formal manner.

2.4.4 NVLAP gives due notice of any changes to its requirements for accreditation. Laboratories are required to meet any additional requirements within announced time frames.

2.5 Termination of a LAP

2.5.1 The Chief of NVLAP may terminate a LAP when he/she determines that a need no longer exists to accredit laboratories for the services covered under the scope of the LAP.

The Chief of NVLAP may solicit comments on the proposed termination if he/she determines that input from interested parties is necessary.

In the event that the Chief of NVLAP decides to terminate a LAP, a notice will be published in the *Federal Register* setting forth the basis for that determination.

2.5.2 When a LAP is terminated, NVLAP will no longer grant or renew accreditations following the effective date of termination. Accreditations previously granted remain effective until their expiration date unless terminated voluntarily by the laboratory or revoked by NVLAP. Technical expertise is maintained by NVLAP while any accreditation remains effective.

3 Accreditation process

3.1 Application for accreditation

3.1.1 General

A laboratory may apply for accreditation in any of the established LAPs. In order to initiate the accreditation process, the applicant laboratory shall submit a completed application along with required documentation, agree to conditions for accreditation, and pay all required fees.

3.1.2 Required documentation

3.1.2.1 An applicant laboratory shall complete an application for accreditation that includes, but is not limited to, the following information:

a) the legal name and full address of the laboratory;

b) the ownership of the laboratory;

c) the Authorized Representative's name and contact information;

d) the names, titles and contact information for laboratory staff nominated to serve as Approved Signatories of test or calibration reports that reference NVLAP accreditation;

e) accreditation history, i.e., current accreditations with other accreditation bodies.

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3.1.2.2 The laboratory shall submit the following documentation with the application:

a) an organizational chart defining relationships that are relevant to performing testing and calibrations covered in the accreditation request;

b) a general description of the laboratory, including its facilities and scope of operation;

c) the requested scope of accreditation;

d) quality manual and related management system documentation, as well as records of the latest internal audit and management review.

3.1.3 Conditions for accreditation

By signing the application, the laboratory's Authorized Representative attests that the information in the application is correct and commits the laboratory to fulfill the conditions for accreditation listed in Annex C of this handbook, including attestation that the laboratory has an official copy of ISO/IEC 17025.

3.1.4 Fees for accreditation

NVLAP operates on a cost-reimbursable basis from fees paid by participating laboratories. The NVLAP website includes a description of the fee structure and fee refund policy. The fees are reviewed annually and adjusted as necessary.

3.1.5 Review of application

Upon receipt of a laboratory's application for accreditation, NVLAP assigns a NVLAP Lab Code to the applicant laboratory; requests further information, if necessary; and specifies the next step(s) in the accreditation process.

3.2 Management system review

3.2.1 Assignment of assessor(s)

3.2.1.1 NVLAP selects and qualifies assessors on the basis of their education, work experience, technical knowledge, training, assessment experience, and communication and interpersonal skills.

3.2.1.2 NVLAP uses assessors to evaluate all information collected from an applicant laboratory and to conduct the assessment on NVLAP's behalf at the laboratory and any other sites where activities to be covered by the accreditation are performed.

3.2.1.3 Assessors are assigned to conduct an on-site assessment of a particular laboratory on the basis of how well their knowledge and experience match the scope of testing or calibration to be assessed. NVLAP provides the laboratory with a short biographical sketch of each assessor. The laboratory may object to the assignment of any particular assessor if a conflict of interest or prior business relationship exists.

3.2.2 Document and record review

3.2.2.1 The assigned assessor(s) reviews the laboratory's quality manual and related management system documentation submitted with the application to ensure that all aspects of the management system are

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addressed and satisfy the requirements in this handbook. The assessor may ask for additional management system documents and/or records in order to facilitate the review.

3.2.2.2 The assessor may identify nonconformities during the document and record review. The assessor informs the Authorized Representative in writing of any nonconformities found. NVLAP may require that the laboratory address the nonconformities before the on-site assessment is scheduled. When the management system documentation requires significant revision, NVLAP may require that the laboratory improve its documentation and submit it for further review prior to proceeding with the accreditation process.

3.2.3 Preparation for on-site assessment

3.2.3.1 The assessor contacts the laboratory to schedule a mutually acceptable date for the on-site assessment. An assessment normally takes one to five days depending on the proposed scope of accreditation. Every effort is made to conduct an assessment with as little disruption as possible to the normal operations of the laboratory.

3.2.3.2 If a laboratory requires that its established assessment date be changed, it shall contact the assessor(s). The laboratory is responsible for any costs associated with the date change.

3.2.3.3 Following initial accreditation, NVLAP will conduct an on-site assessment during the first year of accreditation and every two years thereafter. Delay of assessments beyond these intervals may affect a laboratory's accreditation status.

3.2.3.4 An on-site assessment is conducted at all laboratory premises where tests or calibrations are performed. When tests or calibrations are performed at locations other than laboratory premises, NVLAP will determine the process for assessing these activities. The process may include observing tests or calibrations performed at these locations.

3.2.3.5 NVLAP may elect to conduct a preassessment of a laboratory if it determines that such a visit would be useful to evaluate the laboratory's preparedness for the assessment stage of the accreditation process.

3.3 On-site assessment

3.3.1 Conduct of on-site assessment

3.3.1.1 Assessors use checklists provided by NVLAP so that each laboratory receives an assessment comparable to that received by others. Checklists are normative documents that include the requirements outlined in NIST Handbook 150 and the NIST Handbook 150-xx series.

3.3.1.2 At the beginning of the assessment, the assessor(s) conducts an opening meeting with management and laboratory personnel to explain the purpose of the on-site assessment, clearly define the accreditation criteria, and confirm the assessment schedule and the requested scope of accreditation.

3.3.1.3 During the assessment, the assessor(s) gathers objective evidence to verify the laboratory's competence for the requested scope of accreditation. These activities may include examining the management system, reviewing quality and technical records, examining equipment and facilities, interviewing staff, and observing demonstrations of testing or calibrations.

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3.3.1.4 In order to conduct an appropriate assessment of competence, the assessor requires access to laboratory records for all staff members who routinely perform or affect the quality of the testing or calibration for which accreditation is sought. This includes resumes, job descriptions of key personnel, training, and competency evaluations. The assessor need not be given information that violates individual privacy, such as salary, medical information, or performance reviews outside the scope of the accreditation program.

3.3.1.5 At the conclusion of the assessment, the assessor conducts a closing meeting to discuss observations and any nonconformities with the Authorized Representative and other responsible laboratory staff. During the meeting, the laboratory has the opportunity to ask questions about the findings, including nonconformities, if any, and their basis.

3.3.2 Analysis and notification of findings

The assessor informs the laboratory of nonconformities during the on-site assessment and documents the nonconformities in the on-site assessment report.

3.3.3 On-site assessment report

3.3.3.1 At the closing meeting, the assessor submits a written report on the conformance of the laboratory with the accreditation requirements. The report includes as a minimum:

a) date(s) of assessment;

b) the names of the assessor(s) responsible for the report;

c) the names and addresses of all the laboratory locations assessed;

d) the assessed scope of accreditation or reference thereto;

e) comments and/or nonconformities cited by the assessor(s) on the compliance of the laboratory with the accreditation requirements;

f) a copy of completed checklists.

3.3.3.2 The Authorized Representative signs the report to acknowledge that the assessor has discussed its content and agrees to respond to NVLAP regarding resolution of nonconformities within 30 days (see 3.3.4).

3.3.3.3 The assessor forwards the original report to NVLAP and leaves a copy with the laboratory.

3.3.3.4 NVLAP is responsible for the content of the on-site assessment report, including the stating of nonconformities.

3.3.4 Resolution of nonconformities

3.3.4.1 A laboratory shall respond in writing to NVLAP within 30 days of the date of the on-site assessment report, addressing all documented nonconformities. The response shall be signed by the Authorized Representative and shall include documentation that the specified nonconformities have been corrected.

3.3.4.2 All nonconformities shall be satisfactorily resolved before initial accreditation may be granted. If resolution is expected to take longer than 30 days, the laboratory may submit a corrective action plan in its initial response, which typically includes a list of actions, target completion dates, and names of persons responsible for discharging those actions.

The laboratory shall supply evidence that clearly demonstrates that the actions taken have fully resolved the nonconformities. If the laboratory's responses are found to be insufficient, NVLAP may request further information.

3.3.4.3 The laboratory may ask for clarification of a nonconformity from either the assessor during the closing meeting or NVLAP at any time. A laboratory may also challenge the validity of a nonconformity by writing to NVLAP.

3.3.4.4 If substantial nonconformities are cited, NVLAP may require an additional on-site assessment, at additional cost to the laboratory, prior to granting accreditation. All nonconformities and resolutions will be subject to thorough review and evaluation prior to the accreditation decision (see 3.5).

3.4 Proficiency testing

3.4.1 General

3.4.1.1 Proficiency testing, along with document review and on-site assessment, is an integral part of the NVLAP accreditation process. The performance of tests or calibrations and reporting of results from proficiency testing assists NVLAP with determining a laboratory's competence and the effectiveness of its management system. Information obtained from proficiency testing helps to identify technical problems in a laboratory and assists in maintaining the quality of laboratory performance.

3.4.1.2 NVLAP uses proficiency testing programs that are consistent with the requirements contained in ISO/IEC 17043, *Conformity assessment – General requirements for proficiency testing*, where applicable. Proficiency testing may be coordinated by NVLAP itself or by an external provider of proficiency testing services.

3.4.1.3 Where applicable, requirements regarding the minimum level and frequency of participation in proficiency testing by accredited laboratories and other information about proficiency testing programs are provided in NVLAP's program-specific documentation.

3.4.2 Types of proficiency testing

3.4.2.1 Proficiency testing requirements are associated with most fields of accreditation. Proficiency testing techniques vary depending on the nature of the test item, the method in use, and the number of laboratories participating. For examples of types of proficiency testing, see Note 1 of 1.5.21.

3.4.2.2 Proficiency testing using interlaboratory comparisons may utilize randomly selected specimens from a batch of uniform material, selected specimens with known properties and results, artifacts with similar properties that have not been characterized, and one-of-a-kind artifacts.

3.4.2.3 Proficiency testing for calibration laboratories may involve comparison of the results of measurements made by the laboratory on selected instruments or artifacts with calibration results obtained independently by NVLAP.

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3.4.3 Analysis and reporting

NVLAP reviews proficiency testing data as part of the accreditation assessment and decision-making process. For proficiency testing programs organized by NVLAP, each participant's own results are reported only to them. Summary results are available upon request to interested parties (e.g., professional societies and standards-writing bodies); however, the identity and performance of individual laboratories are kept confidential.

3.4.4 Proficiency testing nonconformities

3.4.4.1 Unsatisfactory participation in any NVLAP proficiency testing program is a nonconformity. Proficiency testing nonconformities are defined as, but not limited to, one or more of the following:

a) failure to meet specified proficiency testing performance requirements prescribed by NVLAP;

b) failure to participate in a regularly scheduled "round" of proficiency testing for which the laboratory has received instructions and/or materials;

c) failure to produce acceptable test or calibration results when using materials or artifacts whose properties are well-characterized and known to NVLAP.

3.4.4.2 NVLAP notifies the laboratory of proficiency testing nonconformities and actions to be taken to resolve the nonconformities. Failure to resolve proficiency testing nonconformities will result in denial or suspension of accreditation.

3.5 Accreditation decision

3.5.1 The Chief of NVLAP is responsible for all NVLAP accreditation actions, including granting, renewing, suspending, and revoking any NVLAP accreditation.

3.5.2 NVLAP evaluates the information gathered during the accreditation process, including:

a) information provided on the application;

b) results of management system documentation review;

c) on-site assessment reports;

d) actions taken by the laboratory to correct nonconformities;

e) results of proficiency testing, if required.

3.5.3 Based on this evaluation, NVLAP makes the decision whether or not to accredit the laboratory. If the evaluation reveals nonconformities beyond those identified in the assessment process, NVLAP informs the laboratory in writing of the nonconformities. The laboratory shall respond as specified in 3.3.4. All nonconformities must be resolved to NVLAP's satisfaction before accreditation can be granted.

NOTE In the event that NVLAP determines accreditation cannot be granted, the laboratory has the right to appeal that decision (see 3.13).

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3.6 Granting accreditation

3.6.1 NVLAP grants initial accreditation when a laboratory has met all NVLAP criteria for accreditation. One of four accreditation renewal dates (January 1, April 1, July 1, or October 1) is assigned to the laboratory and is usually retained as long as the laboratory remains in the program. NVLAP accreditation is valid from the date of granting accreditation to the assigned renewal date. If accreditation is not renewed by the laboratory prior to the renewal date, the accreditation will expire.

3.6.2 When accreditation is granted, NVLAP provides a Certificate of Accreditation and a Scope of Accreditation to the laboratory.

3.6.3 The accreditation documents include the following information:

a) the name and address of the laboratory that has been accredited;

b) the laboratory's Authorized Representative;

c) the effective and the expiration dates of the accreditation;

d) the NVLAP Lab Code.

3.6.4 The scope of accreditation shall also identify:

a) the tests or calibrations, or types of tests or calibrations, for which accreditation has been granted,

b) for calibrations, the calibration and measurement capability (CMC) expressed as:

— measurand or reference material;

— calibration/measurement method/procedure and/or type of instrument/material to be calibrated/measured;

— measurement range and additional parameters where applicable, e.g., frequency of applied voltage;

— uncertainty of measurement.

c) for tests, the materials or products tested, the methods used, and the tests performed.

NOTE: Refer to ILAC P14, Clause 5 for additional information on calibration scopes of accreditation.

3.7 Renewal of accreditation

3.7.1 Each accredited laboratory receives a renewal notification before the expiration date of its accreditation to allow sufficient time to complete the renewal process.

3.7.2 Fees for renewal are charged according to services required as listed on the NVLAP website.

3.7.3 Both the required information and fees shall be received by NVLAP prior to expiration of the laboratory's current accreditation to avoid a lapse in accreditation.

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3.7.4 On-site assessments of currently accredited laboratories are performed in accordance with the procedures in 3.2 and 3.3. If nonconformities are found during the assessment of an accredited laboratory, the laboratory must submit a satisfactory response concerning resolution of nonconformities within 30 days of notification.

3.7.5 Should resolution take longer than 30 days, the laboratory's accreditation may be subject to adverse action. In those cases where nonconformities do not directly affect the results of tests or calibrations, NVLAP, at its discretion, may accept a plan of corrective action as satisfactory resolution. When this occurs, laboratories are expected to submit sufficient objective evidence (see 1.5.20) to demonstrate that the nonconformities have been resolved according to the plan.

3.7.6 Undue delay in the resolution of nonconformities may necessitate another on-site assessment at additional cost to the laboratory.

3.8 Monitoring visits

3.8.1 In addition to regularly scheduled assessments, NVLAP may conduct monitoring visits at any time during the accreditation period. They may occur for cause or on a random selection basis. While most monitoring visits will be scheduled in advance with the laboratory, NVLAP may conduct unannounced monitoring visits.

3.8.2 The scope of a monitoring visit may range from checking a few designated items to a complete assessment; for example, the assessors may review nonconformity resolutions; verify reported changes in the laboratory's personnel, facilities, or operations; administer proficiency testing; or investigate complaints, when appropriate.

3.9 Changes to scope of accreditation

A laboratory may request in writing changes to its scope of accreditation. If the laboratory requests additions to its scope, it shall meet all NVLAP requirements for the additional tests or calibrations, types of tests or calibrations, or standards. NVLAP determines the need for an additional on-site assessment and/or proficiency testing on a case-by-case basis.

A laboratory may also request deletions from its scope of accreditation. The deletions may be temporary (see 3.10) or permanent.

3.10 Suspension of accreditation

3.10.1 NVLAP may suspend an accredited laboratory's accreditation if there is evidence that the laboratory has persistently failed to comply with the criteria for accreditation; e.g., evidence obtained during the assessment process, or the laboratory's notification to NVLAP of a major change [see Annex C, item h)]. Suspension can be for all or part of a laboratory's accreditation. Depending on the nature of the issues involved, NVLAP may also propose to revoke accreditation (see 3.11).

3.10.2 If a laboratory's accreditation is suspended, NVLAP notifies the laboratory of that action, stating the reasons for and conditions of the suspension and specifying the action(s) the laboratory must take to have its accreditation reinstated. A reassessment of the laboratory may also be required for reinstatement.

3.10.3 A suspended laboratory shall refrain from using the NVLAP symbol in the area(s) affected by the suspension. When issues that led to the suspension are resolved, NVLAP will reinstate the laboratory's

accreditation and authorize the laboratory to resume testing or calibration activities in the previously suspended area(s) as an accredited laboratory.

3.11 Revocation of accreditation

3.11.1 If NVLAP proposes to revoke the accreditation of a laboratory, the NVLAP Chief informs the laboratory of the reasons for the proposed revocation and the procedure for appealing such a decision. Revocation can be for all or part of a laboratory's scope of accreditation. NVLAP may give the laboratory the option of voluntarily terminating the accreditation (see 3.12).

3.11.2 The laboratory has 30 days from the date of receipt of the proposed revocation letter to appeal the decision (see 3.13). The proposed revocation becomes final through the issuance of a written decision to the laboratory in the event that the laboratory does not appeal the proposed denial or revocation within the 30-day period.

3.11.3 A laboratory whose accreditation has been revoked shall cease use of the NVLAP symbol on any of its test or calibration reports, correspondence, or advertising related to the area(s) affected by the revocation. If the revocation affects only some, but not all of the items listed on a laboratory's Scope of Accreditation, NVLAP will issue a revised scope that excludes the revoked area(s).

3.11.4 A laboratory whose accreditation has been revoked, may reapply for accreditation and complete the assessment and evaluation process (see 3.1 to 3.6).

3.12 Voluntary termination of accreditation

3.12.1 A laboratory may request to terminate its accreditation by advising NVLAP in writing.

3.12.2 Upon receipt of a request for termination, NVLAP will terminate the laboratory's accreditation, notify the laboratory that its accreditation has been terminated, and instruct the laboratory to remove the NVLAP symbol from all test and calibration reports, correspondence, and advertising.

3.12.3 A laboratory whose accreditation has been voluntarily terminated may reapply for accreditation and complete the assessment and evaluation process (see 3.1 to 3.6).

3.13 Appeals

3.13.1 A laboratory has the right to appeal any adverse decision made by NVLAP related to its accreditation status. Such decisions include refusal to accept an application; refusal to proceed with an assessment; corrective action requests; changes in scope of accreditation; decision to deny, suspend, or revoke accreditation; and any other action that impedes the attainment of accreditation. The laboratory submits its appeal in writing to NVLAP.

3.13.2 Appeals are handled by the next higher level in the organization. Appeals of decisions made by NVLAP Program Managers (e.g., acceptance of an application, corrective action requests) are handled by the NVLAP Chief. Appeals of decisions made by the NVLAP Chief (e.g., final accreditation, revocation of accreditation) are handled by the Director of NIST. In some cases, a qualified technical expert(s), who is independent of the subject of appeal, may be called to investigate an appeal.

3.13.3 The person(s) assigned to investigate the appeal decides on the validity of the appeal and, if appropriate, renders a recommendation. NVLAP advises the appellant of the outcome of these

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deliberations and any recourse for further appeal. If the laboratory appeals a decision to the Director of NIST, the adverse decision will be stayed pending the outcome of the appeal.

4 Criteria for accreditation

4.1 General

4.1.1 The NVLAP criteria for accreditation are made up of several documents:

a) the NVLAP conditions for accreditation (see Annex C);

b) the conformity assessment standard, ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*, which sets out the general requirements for the accreditation of testing and calibration laboratories;

c) the NIST Handbook 150 series of handbooks, which provide additional requirements, guidance, and interpretive information applicable to specific NVLAP laboratory accreditation programs (LAPs).

4.1.2 The NVLAP conditions for accreditation and the NIST Handbook 150 series of handbooks are available for download from the NVLAP website http://www.nist.gov/nvlap. The ISO/IEC 17025 standard is not supplied by NVLAP. Each applicant and accredited laboratory shall have an official copy of this standard from a legitimate source.

4.1.3 In between the formal revisions of NIST Handbook 150, NVLAP may publish NVLAP Policy Guides to augment NIST Handbook 150 and give notice of any changes on the requirements for accreditation. A Policy Guide may set forth new, or clarify existing, general policies, procedures, and requirements. The content of a NVLAP Policy Guide supersedes any previous criteria where indicated.

4.2 NVLAP program-specific requirements

4.2.1 Program-specific handbooks contain the technical requirements, guidance, and interpretations that are specific to each field of accreditation for which NVLAP offers accreditation.

4.2.2 NVLAP may publish NVLAP Lab Bulletins, as needed, to provide additional information relating to a specific LAP, including program additions and changes, or to clarify program-specific requirements. The additions or changes to a program that are published in a NVLAP Lab Bulletin supersede the requirements of the currently published handbook until such time as the additions or changes are published in a revision of the handbook.

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Annex A
(normative)

Referencing NVLAP accreditation

A.1 General

The term *NVLAP* and the NVLAP logo are registered marks of the Federal Government, which retains exclusive rights to control the use thereof. Permission to use the term and symbol (see 1.5.19) is granted to NVLAP-accredited laboratories for the limited purpose of announcing their accredited status, and for use on reports that describe only testing or calibration within the scope of accreditation. NVLAP reserves the right to control the quality of the use of the NVLAP term, logo, and symbol.

The NVLAP symbol clearly indicates the activity to which the accreditation is related through incorporation of the unique NVLAP Lab Code and the word "testing" or "calibration."

The procedures for the use of the Combined ILAC MRA Mark by accredited laboratories within the scope of the ILAC MRA are set out in Annex E.

A.2 Conditions for referencing NVLAP accreditation

In order to become and remain accredited, laboratories shall comply with the following conditions pertaining to the use of the term *NVLAP*, the NVLAP logo, and NVLAP symbol. Failure to comply with these conditions may result in suspension or revocation of a laboratory's accreditation.

a) An accredited laboratory shall have a policy and procedure for controlling the use of the term *NVLAP* and the NVLAP symbol. The procedure shall be unique and include actions to be taken specific to the laboratory.

b) An applicant laboratory that has not yet achieved accreditation may make reference to its applicant status. If the NVLAP Lab Code is used, it shall be accompanied by a statement accurately reflecting the laboratory's status. An applicant laboratory shall not use the NVLAP logo or symbol.

c) The term and/or symbol shall not be used in a manner that brings NVLAP into disrepute or misrepresents a laboratory's scope of accreditation or accredited status.

d) When the term *NVLAP* is used to reference a laboratory's accredited status, it shall be accompanied by the NVLAP Lab Code.

e) The use of the NVLAP term and/or symbol on a laboratory's test or calibration reports shall be limited to the specific location(s), site(s), or field activity(ies) as identified on the scope of the accreditation.

f) A test or calibration report bearing the term and/or symbol shall include a statement that the report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

g) A laboratory shall not use the terms *certified* or *registered* when referencing its NVLAP accreditation or its conformance to ISO/IEC 17025. The correct term is *accredited.*

h) When an accredited laboratory uses the term and/or symbol in a contract or proposal, the laboratory shall reference its current accreditation status and provide a copy of, or link to its scope of accreditation.

A.3 Reproduction of NVLAP symbol

A.3.1 The following rules shall apply when a laboratory uses the NVLAP symbol to reference its accredited status.

a) The type of activity (testing or calibration) and the NVLAP Lab Code shall appear below and in close proximity to the logo (Fig. 1). The width of the caption shall not exceed the width of the logo itself.

b) The symbol shall stand by itself and shall not be combined with any other logo, symbol, or graphic. As an exception to this rule, the NVLAP symbol may be used in combination with the ILAC MRA Mark by accredited laboratories under the provisions set forth in Annex E.

c) The aspect ratio (width to height) of the NVLAP logo shall be 2.25 to 1.

d) The symbol shall be of a size that allows the caption (type of activity and NVLAP Lab Code) to be easily read.

e) The symbol may be filled or unfilled. In the case of a filled symbol, the same color shall be used for the outline and the fill.

NOTE Electronic copies of the NVLAP logo are available from NVLAP upon request.

A.4 Approved signatories

The name of at least one Approved Signatory shall appear on a test or calibration report that displays the NVLAP symbol or references NVLAP accreditation. A computer-generated report may have the Approved Signatory's name printed along with the test or calibration results, as long as there is evidence that there is a system in place to ensure that the report cannot be generated without the review and consent of the Approved Signatory. There may be legal or contractual requirements for original signatures to appear on the report.

NOTE: NVLAP defines the person(s) who authorizes the test report or calibration certificate as the Approved Signatory (see 1.5.2).

A.5 Reporting results not covered by the scope of accreditation

A.5.1 The laboratory may use the term and/or symbol on test or calibration reports when some or all of the data are from tests or calibrations performed by the laboratory under its scope of accreditation. The laboratory shall not use the term and/or symbol on a report that contains no accredited data.

A.5.2 A test or calibration report that contains both data covered by the accreditation and data not covered by the accreditation shall clearly identify the data that are not covered by the accreditation. The report must prominently display the following statement at the beginning of the report: "This report contains data that are not covered by the NVLAP accreditation."

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A.5.3 If a customer requests an accredited laboratory to generate a test or calibration report based on data obtained by another laboratory, the accredited laboratory shall ensure that it is not misrepresenting the data as being covered under its accreditation. The test or calibration report shall meet the requirements of ISO/IEC 17025:2005, 5.10.2 b), as well as the conditions for referencing NVLAP accreditation found in this annex.

A.5.4 The laboratory shall not: issue a test or calibration report that:

a) contains data not generated specifically for the product identified in that report without an indication of the original source of the data; or

b) uses the NVLAP term and/or symbol for data from tests not performed by the laboratory.

When NVLAP obtains any such reports, the laboratory shall be required to apply its procedures for control of nonconforming work and take corrective action. Depending on the circumstances, a laboratory's accreditation status may be affected.

A.5.5 The NVLAP symbol shall not be included on correspondence that covers a test or calibration report in which none of the results are within the scope of accreditation, or that covers work proposals or quotes if none of the work is within the scope of accreditation.

A.6 Calibration labels on equipment

A.6.1 A laboratory may attach a calibration label containing the NVLAP symbol to an item of equipment that it has calibrated provided that the equipment has been calibrated using calibration methods covered by the laboratory's scope of accreditation.

A.6.2 Calibration labels containing the NVLAP symbol shall not give the impression that NVLAP has approved or calibrated the equipment.

A.6.3 In addition, the calibration label usually includes the following information:

a) the name of the accredited calibration laboratory;

b) equipment identification;

c) date of calibration;

d) cross reference to the calibration certificate issued in respect of the calibration.

A.7 Subcontracted tests and calibrations

A.7.1 When the term and/or symbol are used on test or calibration reports that also include work done by subcontracted laboratories, such use shall be limited to reports in which some or all of the data are from tests or calibrations performed by the contracted laboratory under its scope of accreditation.

A.7.2 A test or calibration report that contains both data covered by the accreditation of the contracted laboratory and data provided by a subcontractor shall clearly identify the data that were provided by the subcontracted laboratory. The report must prominently display the following statement at the beginning of the report: "This report contains data that were produced under subcontract by Laboratory X." If the subcontracted laboratory is accredited by NVLAP, then its Lab Code should also be stated. If the

subcontracted laboratory is accredited by a body other than NVLAP, then the name of the accreditation body and the laboratory's number or other unique identifier shall also be stated. If the subcontracted laboratory is not accredited, then this must be stated.

A.8 Opinions and interpretations

A.8.1 When opinions and interpretations are covered by the NVLAP scope of accreditation, they may be included on a report endorsed with the NVLAP symbol only when the requirements of ISO/IEC 17025:2005, 5.10.5 are met; i.e., opinions and interpretations shall be clearly marked.

A.8.2 Where such statements of opinion and interpretation are outside the scope of accreditation, the report shall display the following disclaimer close to the NVLAP symbol or to the expression of opinion: "The opinions/interpretations expressed in this report are outside the scope of this laboratory's accreditation."

A.9 Advertising and promotional materials

A.9.1 An accredited laboratory may use the NVLAP symbol in advertising or promotional materials concerning the laboratory's accreditation, provided that the laboratory fully conforms to the requirements for claiming accreditation status and ensures there is no misrepresentation of the status and the scope of accreditation.

A.9.2 Permitted uses of the NVLAP symbol in advertising and promotional materials include:

a) letterheads;

b) brochures and publications;

c) business cards (as long as the symbol is not used in a way that could imply personnel certification);

d) websites;

e) other communication media.

A.9.3 When a laboratory uses the NVLAP symbol in advertising and promotional materials, such as a webpage banner or product catalog, such use shall not imply NVLAP endorsement or approval of the advertised products or items. Further, the accredited laboratory shall ensure that these requirements for referencing NVLAP accreditation are incorporated into contracts to perform work for distributors or resellers of a product that has been tested or calibrated by the accredited laboratory; i.e., a product distributor or reseller shall not reference NVLAP accreditation in a manner that implies that the distributor or reseller is accredited or can produce accredited test or calibration results. The accredited laboratory shall also ensure that each distributor or reseller includes a disclaimer when referencing the accredited laboratory's accreditation stating the distributor or reseller is not accredited by NVLAP.

A.9.4 When using the NVLAP symbol for advertising and promotional materials, an organization with multiple laboratory accreditations may list all of its NVLAP Lab Codes beneath the logo to form the symbol (see example in Fig. 2) or use another means of conveying the same information that is approved by NVLAP. However, this form of the symbol shall not be used on laboratory reports and certificates. Organizations that have both accredited and unaccredited sites shall ensure that when the NVLAP symbol is used in corporate advertising and promotional materials, such use does not imply that accreditation is

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held for sites that are not accredited and does not misrepresent the scope of accreditation at accredited sites.

NOTE: Other variations for the symbol for use in advertising by laboratories with multiple accreditations may be approved on a case-by-case basis by NVLAP.

A.10 Misuse of NVLAP term, logo, or symbol

A.10.1 NVLAP investigates any evidence of misuse of the NVLAP symbol or claim of accreditation status. The actions taken by NVLAP to address violations of its policy and procedures for referencing NVLAP accreditation may include requests for corrective action, suspension of accreditation, and/or legal action, as necessary.

A.10.2 NVLAP has procedures to ensure that an accredited laboratory discontinues the use of the NVLAP symbol or any reference to NVLAP accreditation status for testing or calibration immediately on suspension, revocation, or voluntary termination of the accreditation (see 3.10, 3.11, and 3.12). This includes any reference to NVLAP accreditation in test and calibration reports, correspondence, promotional materials, and advertising, including laboratory websites.

A.11 Examples of the NVLAP symbol

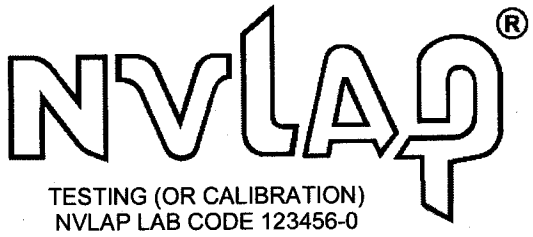

Figure 1. NVLAP symbol.

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NVLAP®

TESTING (OR CALIBRATION)

NVLAP LAB CODE 000000-0
NVLAP LAB CODE 000001-0
NVLAP LAB CODE 000002-0
NVLAP LAB CODE 000003-0

Figure 2. Example of NVLAP symbol for a laboratory with multiple accreditations (used for advertising and promotional purposes only)

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Annex B
(normative)

Implementation of traceability policy in accredited laboratories

B.1 Policy

It is a fundamental requirement that the results of all accredited calibrations and the results of all calibrations required to support accredited tests shall be traceable to the SI (the International System of Units) through standards maintained by NIST or other internationally recognized national metrology institutes (NMIs). ISO/IEC 17025:2005, 5.6 sets out the specific requirements for traceability to be met by testing and calibration laboratories. This annex describes how these requirements shall be met and how traceability of measurement is assured by an accredited laboratory. The structure of this annex is consistent with ILAC-P10:01/2013, which describes the ILAC policy with regard to the metrological traceability requirements from ISO/IEC 17025.

Internationally recognized NMIs are those that are signatory to the Comité International des Poids et Mesures (CIPM) Mutual Recognition Arrangement (MRA) titled "Mutual recognition of national measurement standards and of calibration and measurement certificates issued by national metrology institutes" and that have the necessary calibration services listed in Appendix C of the MRA, *Calibration and Measurement Capabilities – CMCs*, located in the Key Comparison Database (KCDB). For more details on the CIPM MRA and the CMC database, please see http://www.bipm.org/en/cipm-mra/ or visit the NVLAP website.

B.2 General procedures

B.2.1 Laboratories shall be able to demonstrate proper use of traceable standards and test and measurement equipment by competent laboratory personnel in a suitable environment in performing the tests for which accreditation is desired or held.

B.2.2 Calibration certificates received by NVLAP-accredited testing and calibration laboratories with new or recalibrated equipment shall meet the requirements of ISO/IEC 17025. The certificates shall include the uncertainty of measurement and/or a statement of compliance with an identified metrological specification or clauses thereof. For additional information, see ILAC-P14, *ILAC Policy ILAC Policy for Uncertainty in Calibration.*

B.2.3 For the purpose of assuring traceability, an accredited laboratory may calibrate its own equipment if the appropriate requirements of NIST Handbook 150 have been met. Thus, testing laboratories that perform calibrations only for themselves do not need to be accredited as calibration laboratories, and calibration laboratories that perform specific calibrations only for themselves to support their accredited services do not need to be accredited for those specific calibrations. Results of internal calibrations shall meet the requirements of B.2.2.

B.3 Demonstration of traceability

B.3.1 General

Traceability to the SI shall be demonstrated by one of the following paths:

a) use of an NMI whose service is covered by the CIPM MRA, or

b) use of an accredited calibration laboratory, or

c) use of an NMI that does not have a CMC in the KCDB, or a calibration laboratory whose service is not covered by the ILAC MRA.

The requirements for each of these paths of traceability are described in B.3.2 through B.3.4.

B.3.2 Use of an NMI whose service is covered by the CIPM MRA

A NVLAP-accredited laboratory may submit appropriate physical standards and test and measurement equipment directly to NIST or, when appropriate, to another CIPM MRA signatory-NMI that has a CMC in the KCDB for the measurement in question. An accredited laboratory may obtain certified reference materials from NIST (called "Standard Reference Materials" under copyright) or from another national metrology institute.

B.3.3 Use of an accredited calibration laboratory

A NVLAP-accredited laboratory that does not demonstrate traceability as described in B.3.2 shall use accredited calibration laboratory services, when available. Accredited calibration laboratories are those accredited by NVLAP or by any accreditation body that is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA). A listing of NVLAP-accredited calibration laboratories is available through the NVLAP online directory of accredited laboratories at < https://www-s.nist.gov/niws/index.cfm?event=directory.search>. A listing of ILAC MRA signatories is available at http://www.ilac.org/.

B.3.4 Use of an NMI whose service is not covered by the CIPM MRA or a calibration laboratory whose service is not covered by the ILAC MRA

B.3.4.1 General

If an appropriate accredited calibration service provider is not available, a NVLAP-accredited laboratory may submit physical standards or test and measurement equipment to a provider whose services do not meet the requirements of B.3.2 or B.3.3. However, the services shall meet the relevant criteria for metrological traceability in ISO/IEC 17025 (see B.3.4.2 and B.3.4.3).

B.3.4.2 NMI that does not meet the requirements in B.3.2.

There are a number of factors that shall be considered in the situation where an NMI's service is suitable for the intended need, but is not covered by the CIPA MRA. Those factors may include, but are not limited to:

- membership or recognition status in CIPM;
- CMCs for same parameter in a different range;
- unpublished results of key comparisons;
- regional or bilateral intercomparisons;

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- results of special tests.

In such cases, the NVLAP-accredited laboratory shall consult with NVLAP to determine the appropriate means of demonstrating traceability.

B.3.4.3 Calibration service provider that does not meet the requirements in B.3.3

If a NVLAP-accredited laboratory uses a calibration service provider that is not accredited by an ILAC MRA signatory, the laboratory shall:

a) document the lack of an appropriately accredited calibration service provider;

b) audit the claim of traceability of the provider of the calibration service and document the following areas related to the calibration and claim of traceability of its standards and test and measurement equipment:

   1) information regarding assessment of the quality system used by the calibration service provider;

   2) the calibration procedure(s) used by the calibration service provider;

   3) the physical standards or other test and measurement equipment used by the calibration service provider (including evidence of traceability to standards maintained by NIST or an appropriate national metrology institute and copies of relevant calibration certificates);

   4) information regarding the calibration intervals of relevant standards or other test and measurement equipment;

   5) the environmental conditions of the laboratory;

   6) the method(s) by which uncertainties are determined (e.g., Guide to the Expression of Uncertainty in Measurement (GUM)); and

   7) the relative uncertainties achieved at all steps of the process;

c) pursue the traceability chain until traceability to appropriate stated references is completely validated, when a calibration service provider submits physical standards and/or test and measurement equipment used in the calibration to another laboratory(s) not accredited by NVLAP;

d) enter the audit documentation, including all findings of nonconformance and resolutions of those findings, into the laboratory's quality management record-keeping system.

NOTE An on-site visit to the provider of the calibration service is encouraged, but is not required as long as the information listed above is obtained and otherwise verified. Self-declaration of compliance to ISO/IEC 17025 or other relevant standards by a calibration service provider is not acceptable evidence of verification of traceability. Citation of a NIST Test Number by the calibration service provider likewise is not acceptable evidence of verification of traceability.

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B.3.5 Traceability to the SI not available

If traceability to the SI is not available, a NVLAP-accredited laboratory may demonstrate comparison to a widely used standard that is clearly specified and documented as mutually agreeable to all parties concerned.

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Annex C
(normative)

Conditions for accreditation

To become accredited and maintain accreditation, a laboratory shall agree in writing to comply with the following NVLAP conditions for accreditation:

a) comply at all times with the NVLAP requirements for accreditation as set forth in NIST Handbook 150 and relevant technical documents, including any changes to those requirements;

b) fulfill the accreditation procedure, especially to receive the assessment team and allow access to information, documents, and records;

c) when the laboratory conducts activities at clients' sites, have arrangements to provide access to the assessment team;

d) pay the fees charged to the applicant laboratory as determined by NVLAP, and maintain relevant financial agreements;

e) participate in proficiency testing as required;

f) follow NVLAP conditions for referencing accreditation status (see Annex A and Annex E);

g) resolve all nonconformities;

h) report to NVLAP within 30 days any significant changes relevant to its accreditation, in any aspect of its status or operation relating to:

   — legal, commercial, organizational, or ownership status,

   — organization, top management, or key personnel, including Authorized Representative and Approved Signatories,

   — main policies,

   — resources and location, including equipment, facilities, and working environment, where significant,

   — scope of accreditation, or

   — other matters that may affect the laboratory's ability to comply with the requirements of NIST Handbook 150 and/or relevant technical documents;

i) return to NVLAP the Certificate of Accreditation and the Scope of Accreditation should it be requested to do so by NVLAP.

In addition to the confidentiality provisions of NIST Handbook 150 paragraph 1.7, NVLAP (administered by NIST) and the laboratory seeking accreditation acknowledge and agree that the accreditation

assessments and proficiency testing work done by NIST/NVLAP is done in accordance with the authority granted to NIST by Title 15 United States Code Section 3710a. The Parties further agree that to the extent permitted by law, NIST will protect information obtained during application, on-site assessment, proficiency testing, evaluation, and accreditation from disclosure pursuant to Title 15 USC 3710a(c)(7)(A) and (7)(B) for a period of five (5) years after it is obtained.

For the first five years that laboratory information is held by NVLAP, both confidentiality provisions will be in force — NIST Handbook 150 and 15USC3710a. Information in NVLAP's possession for more than five years will continue to be held in confidence under the provision of NIST Handbook 150.

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Annex D
(normative)

Accreditation of laboratories located outside of the United States

D.1 Additional requirements for laboratories located outside of the United States

D.1.1 Laboratories shall provide all documents to NVLAP in English including, but not limited to, applications, quality manuals, internal audit and management review records, nonconformity responses, and records serving as objective evidence of compliance with NVLAP requirements. During an on-site assessment, if the laboratory personnel do not speak English, the laboratory shall provide an interpreter(s), subject to NVLAP approval. The interpreter(s) will assist the assessor(s) with conversing directly with laboratory management and technical staff and with reviewing laboratory documentation.

D.1.2 If the fees listed on the NVLAP fee schedule do not cover the cost of an on-site assessment, the laboratory will be responsible for all additional costs; e.g., travel by NVLAP assessors, shipment of proficiency testing materials to the laboratory, and additional administrative expenses. To ensure that the initial or renewal application is processed without delay, payment (in U.S. currency) of the appropriate fees should accompany the application. When all the additional costs associated with the application have been identified, an invoice for any additional fee amount owed will be sent to the laboratory.

D.1.3 Pursuant to U.S. Department of Commerce export regulations and/or U.S. Department of State International Traffic in Arms Regulations, certain technologies, equipment, data and software may not be exported from the United States to certain foreign destinations or may not be shared with certain foreign nationals within the United States without first obtaining an export license or official approval. If a laboratory uses or possesses regulated technologies, NVLAP requires that the laboratory possess, and show upon request, the appropriate license or official U.S. Government approval. For export and license information for the Department of Commerce regulations, see the Bureau of Industry and Security website, http://www.bis.doc.gov/PoliciesAndRegulations/index.htm. For export and license information regarding the State Department International Traffic in Arms Regulations, see the Directorate of Defense Trade Controls website, http://www.pmddtc.state.gov/regulations_laws/itar.html.

D.2 Cross-frontier policy

D.2.1 To meet its obligations as a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (Arrangement), NVLAP has a cross-frontier accreditation policy in harmony with ILAC-G21, *Cross Frontier Accreditation—Principles for Avoiding Duplication.* When a laboratory located outside of the United States applies for NVLAP accreditation, it is NVLAP policy to communicate with and cooperate with, whenever possible, ILAC Arrangement signatory laboratory accreditation bodies in the economy of the applicant laboratory.

The purpose of the cross-frontier policy is to ensure that test reports and calibration certificates issued by accredited laboratories will be accepted worldwide and to increase confidence among laboratory accreditation bodies worldwide while reducing the burden on laboratories caused by duplicate accreditations.

D.2.2 NVLAP will discuss this policy with applicant laboratories before NVLAP contacts any laboratory accreditation bodies in the laboratory's own economy.

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Annex E
(normative)

Use of the Accredited Laboratory Combined ILAC MRA Mark

E.1 General

This annex sets forth the policy and procedure for the use of the Accredited Laboratory Combined ILAC MRA Mark by NVLAP-accredited laboratories. The Accredited Laboratory Combined ILAC MRA Mark is the ILAC MRA Mark in combination with the NVLAP symbol. NVLAP may grant permission to its accredited laboratories to use the Accredited Laboratory Combined ILAC MRA Mark for accreditation activities covered by the scope of its ILAC MRA signatory status. NVLAP conforms to the rules for the use of the ILAC MRA Mark as set forth in ILAC-R7:05/2015, *Rules for the Use of the ILAC MRA Mark.*

E.2 Policy for use of the Accredited Laboratory Combined ILAC MRA Mark

The use of the Accredited Laboratory Combined MRA Mark (hereinafter called the "Mark") is governed by the requirements for use of the NVLAP term and symbol as set out in Annex A. Permissible uses include reports and certificates, letterheads, contracts, business cards, brochures, advertising, and websites.

E.3 Request from an accredited laboratory to use the Mark

E.3.1 A laboratory wishing to use the Mark shall hold an accreditation within a field of accreditation covered by NVLAP's scope of recognition under the ILAC MRA. The laboratory shall send a request to NVLAP that includes:

- the policy and procedure for controlling the Mark as described in E.4 a);
- an example of the Mark in a format that complies with the rules for reproduction in E.5.

E.3.2 The laboratory shall not use the Mark before written approval is received from NVLAP.

E.3.3 Permission to use the Mark extends only to accredited laboratories established in economies where the Mark is registered; however the laboratory may be able to use the Mark for activities undertaken outside the economy.

E.4 Conditions for use of the Mark

By signing the NVLAP conditions for accreditation (see Annex C), the laboratory agrees to fulfilling the following conditions for using the Mark.

a) The laboratory shall have a policy and procedure for controlling the use of the Mark. This procedure may be combined with the policy and procedure for controlling the use of the term *NVLAP* and the NVLAP symbol [see Annex A, A.2 a)].

b) The laboratory shall meet the same requirements for referencing the Mark as those published for referencing NVLAP accreditation in Annex A, with the exception of the rules for reproduction. The rules for reproduction of the Mark are set out in E.5 below and supersede those in Annex A, A.3.1, b), c) and e).

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E.5 Reproduction of the Mark

E.5.1 A laboratory shall use the Mark in the proportions shown in Figure 1 below. It shall not be distorted, compressed, or stretched in any way.

E.5.2 The text within the Mark (ILAC MRA, NVLAP, NVLAP Lab Code, and type of accreditation activity) shall be readable.

E.5.3 The laboratory shall use the Mark on a background that will not impede readability.

E.5.4 The laboratory may reproduce the Mark in black and white or in one of the following approved colors:

- Process (CMYK) Color Breakdown (C100 M56 Y0 K0)
- Pantone (PMS) Color Breakdown (Pantone 293c, blue)
- Website (RBG) Color Breakdown (R0 G0 B229).

NOTE An electronic copy of the Mark is available from NVLAP upon request.

E.6 Misuse of the Mark

E.6.1 NVLAP will monitor the use of the Mark by accredited laboratories in conjunction with monitoring the use of the NVLAP symbol.

E.6.2 NVLAP will take action on inappropriate uses of the Mark. Such action may include a request for corrective action, suspension or revocation of accreditation, or legal action.

E.7 Examples of the Accredited Laboratory Combined ILAC MRA Mark

The template and proportions for the Mark are shown in Figure 1.

Figure 1. Accredited Laboratory Combined ILAC MRA Mark