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A GLOSSARY OF STANDARDS-RELATED TERMINOLOGY

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## A GLOSSARY OF STANDARDS-RELATED TERMINOLOGY

## D. R. Mackay, Editor Office of Standards Code and Information National Institute of Standards and Technology

### Abstract

This glossary provides definitions of 95 terms that are commonly used in standardization, certification, laboratory accreditation, and quality control activities. Multiple definitions are provided in some cases to identify organizational differences in the use of terms. In each case the source of the definition is indicated. The terms are presented in a logically structured format, beginning with general terms and moving to more specific terms.

## <u>Keywords</u>

accreditation; certification; glossary; laboratory accreditation; quality control; standardization; standards; terminology

#### A Glossary of Standards-Related Terminology

## Introduction

With the increasing emphasis on trade throughout the world, the subjects of <u>standardization</u>, <u>certification</u>, <u>laboratory</u> <u>accreditation</u>, and <u>guality control</u> have greatly increased in importance. More and more organizations, companies and individuals have recognized the value of standards and the benefits that can be derived from their use in the marketplace. Unfortunately, much confusion and misunderstanding stem from the imprecise use of many terms relating to standards.

The purpose of this glossary is to present commonly accepted definitions of various terms and phrases used in standardization, certification, laboratory accreditation and quality control. An attempt has been made to include terms that are frequently misinterpreted.

The contents of this glossary are not "official" definitions, nor even "consensus" definitions, but are generally accepted by those in the "standards world." The source of each definition is indicated and more than one definition is frequently provided for the same term to reflect differences in application, particularly between international organizations and U.S. organizations. The sources of the definitions are identified as follows:

"ANSI" indicates a definition taken from the American National Standard Z34.1 or Z34.2 published by the American National "Standards Institute (ANSI) in October 1987.

"ASQC" indicates a definition taken from the American Society for Quality Control (ASQC) Standard A-3, "Quality Systems Terminology."

"ASTM" indicates a definition taken from a standard published by the American Society for Testing and Materials (the specific standard is identified after the ASTM acronym).

"DOD" applies to a definition published in Defense Standardization Manual DOD 4120.3-M in 1982.

"IEEE" indicates a definition taken from the Local Area Network (LAN) Committee document 802.3 of the Institute of Electrical and Electronic Engineers (IEEE) published in October 1986.

"ILAC" indicates a definition taken from the report of Task Force C of the International Laboratory Accreditation Conference (ILAC) in 1979.

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"ISO" indicates a definition taken from the fifth edition of ISO Guide 2 - "General terms and their definitions concerning standardization and related activities," published by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) in November 1986.

"EIPSC" applies to a definition initially approved by the Engineering and Information Processing Standards Council of the National Bureau of Standards (now known as the National Institute of Standards and Technology) in 1972. Some of these were edited slightly by the Office of Standards Code and Information (OSCI) in 1988.

"NTEP" identifies a definition established in the National Type Evaluation Program of the National Conference of Weights and Measures which is sponsored by the National Institute of Standards and Technology.

"NVLAP" specifies a definition taken from NBSIR 79-1950, "NVLAP Glossary of Terms for Laboratory Accreditation, Product Certification and Standardization" published by the NBS National Voluntary Laboratory Accreditation Program (NVLAP) in January, 1980, with some minor editorial modifications by OSCI in 1988.

"OSCI" identifies a definition developed by the Office of Standards Code and Information of the National Institute of Standards and Technology in 1988.

"OIML" identifies a definition taken from the 1978 edition of the Vocabulary of Legal Metrology published by the International Organization for Legal Metrology, Paris, France.

"OMB" indicates a definition taken from OMB Circular A-119 "Federal Participation in the Development and Use of Voluntary Standards," issued in October 1983 by the U.S. Office of Management and Budget.

Comments on these definitions will be welcome as will suggestions for additional definitions. Please send them to:

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The definitions are not alphabetically presented, as in a dictionary, but in a logically structured format, beginning with general terms and moving to more specific terms in each of four major areas: <u>standardization</u>, <u>certification</u>, <u>laboratory</u>

<u>accreditation</u>, and <u>quality control</u>. The alphabetical index will assist in locating definitions of specific terms and phrases.

This glossary should benefit those who have been unaware of the "world of standards" or have been only casually acquainted with standards and standards-related activities, or who have remained uncertain about the meaning of particular terms. It is recognized that increasing numbers of individuals have been exposed to the terms presented here when, as manufacturers, distributors, exporters, or others, they have been affected by the provisions of the GATT Standards Code, the European Economic Community directives, the U.S.-Canada Free Trade Agreement, or other domestic or international activities. For example, exports depend heavily on conformance to standards, acceptance of certification marks, and recognition of laboratory accreditation programs.

#### PART I STANDARDIZATION

1. <u>standardization</u>: Activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context. (ISO)

NOTE: In particular, the activity consists of the processes of formulating, issuing and implementing standards. (ISO)

standardization: The process of establishing by common agreement the engineering criteria, terms, principles, practices, materials, items, processes, equipment, parts, sub-assemblies, and assemblies appropriate to achieve the greatest practicable uniformity of products and engineering practices, to ensure the minimum feasible variety of such items and practices, and to effect optimum interchangeability of equipment parts and components. (The product of a standardization effort is a documentary standard.) (EIPSC)

2. <u>simplification</u>: A form of standardization that reduces the number of types, sizes, capacities, or shapes of products, materials, and packages within a definite range to a number which is adequate to meet prevailing needs. (EIPSC)

3. <u>harmonization</u>: The process whereby two or more nations (or standards bodies) agree on the content and application of a standard. Harmonization is accomplished by modification of a national standard (or agreement on a common document by two or more standards bodies) so that it is consistent with the harmonized standard <u>or</u> by countries agreeing to accept products and services that are in conformance with the harmonized standard even if they do not conform to the requirements of their national standard. Furthermore, a standard may be said to be harmonized if its text is technically equivalent to another standard (e.g., a national standard which is technically equivalent to an international standard). (EIPSC)

4. <u>consensus</u>: General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. (ISO)

NOTE: Consensus need not imply unanimity. (ISO)

consensus: Substantial agreement of those concerned with the scope and provisions of a standard as judged by a recognized or duly appointed authority. Consensus implies much more than the concept of a simple majority, but not necessarily unanimity. (EIPSC)

5. <u>consensus procedures</u>: The rules and regulations of a recognized or duly appointed authority that pertain to the development of standards: 1) requiring that all interested and affected parties be given due notice of the initiation and development of a standard; 2) providing interested and affected parties the opportunity to participate in the development of each standard; 3) providing for the considerations of all significant objections to the standard; and 4) reaching substantial agreement in support of the standard with no unresolved objections, as judged by a panel of standards professionals. (OSCI)

6. <u>subject of standardization</u>: Topic to be standardized. (ISO)

NOTE: Standardization may be limited to particular aspects of any subject. For example, in the case of shoes, sizes and durability criteria could be standardized separately. (ISO)

7. <u>field of standardization</u>: Group of related subjects of standardization. (ISO)

NOTE: Engineering, transport, agriculture, and quantities and units, for example, could be regarded as fields of standardization. (ISO)

8. <u>state of the art</u>: Developed stage of technical capability at a given time as regards products, processes and services, based on the relevant consolidated findings of science, technology and experience. (ISO) 9. <u>adoption of a standard</u>: The use of the latest edition of a voluntary standard in whole, in part, or by reference for procurement purposes and the inclusion of the latest edition of a voluntary standard in whole, in part, or by reference in regulation(s). (OMB)

10. <u>reference to standards</u>: The inclusion of standards or parts of standards in specifications or standards, codes, rules or regulations by reference to the identification of those standards and to the organization responsible for the standards. (EIPSC)

11. <u>national standards body</u>: An organization within a country which is recognized as a developer of standards which are widely used within that country. Alternatively, it may be a national organization which is generally recognized as the spokesman for voluntary standardization activities of that country. In other countries, depending upon national political philosophy, national standards bodies may be governmental agencies, private organizations, quasi-governmental, or have various degrees of governmental support and recognition. The national standards body is most often the organizational member of the International Organization for Standardization. (EIPSC)

12. <u>secretariat</u>: The office that provides the administrative and secretarial services for a standardization activity. The secretariat function may include the calling and arranging for meetings, distribution of agenda and documents, preparation of minutes and resolutions, conducting, recording, and reporting letter ballots, control and circulation of official documents, conducting the business of the standards activity between meetings, and carrying out the official correspondence and transactions of the standards activity. (EIPSC)

13. <u>level of standardization</u>: Geographical, political, or economic extent of involvement in standardization. (ISO)

14. <u>international standardization</u>: Standardization in which involvement is open to relevant bodies from all countries. (ISO)

15. <u>regional standardization</u>: Standardization in which involvement is open to relevant bodies from countries from only one geographical, political or economic area of the world. (ISO)

16. <u>national standardization</u>: Standardization that takes place at the level of one specific country. (ISO)

NOTE: Within a country, standardization may take place in the national government, in state or provincial governments, within professional organizations, trade associations or standards development groups as well as within the nationally recognized standards body. (ISO) 17. <u>company standardization</u>: Standardization that takes place within a corporation or company, including the development of specifications used for procurement purposes. (OSCI)

## PART II TYPES OF STANDARDS

18. <u>normative document</u>: Document that provides rules, guidelines or characteristics for activities or their results. (ISO)

NOTE: The term "normative document" is a generic term that covers such documents as standards, technical specifications, codes of practice and regulations. (ISO)

NOTE: "Normative documents" are also referred to as "norms." (OSCI)

19. <u>standard</u>: Document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context. (ISO)

standard: A prescribed set of rules, conditions, or requirements concerned with the definition of terms; classification of components; delineation of procedures; specification of dimensions, materials, performance, design, or operations; measurement of quality and quantity in describing materials, products, systems, services, or practices; or descriptions of fit and measurement of size. (OMB)

20. <u>international standard</u>: Standard that is adopted by an international standardizing/standards organization and made available to the public. (ISO)

international standard: A standard promulgated by an "international organization" (treaty or nontreaty) and recognized as having international applicability. An international standard promulgated by treaty organizations (e.g., FAO, the United Nations Food and Agriculture Organization, and its Codex Alimentarius) is generally mandatory in nature. An international standard promulgated by a nontreaty organization (e.g., ISO, the International Organization for Standardization) is generally not mandatory. However, the latter case implies a moral obligation on the part of the organizations' members to use "best efforts" in adopting international standards as national standards. An international standard may become quasi-mandatory, mandatory or a code, regulation, or rule as a result of its utilization or adoption by a regulatory authority. (EIPSC) 21. <u>regional standard</u>: Standard that is adopted by a regional standardizing/standards organization and made available to the public. (ISO)

regional standard: A standard developed or adopted and promulgated by a regional organization (e.g., COPANT, the Pan American Standards Commission). Regional standards are generally voluntary in nature, representing the joint action of the national standards bodies of a regional group of nations. They may be regarded as voluntary harmonized standards. (EIPSC)

22. <u>national standard</u>: Standard that is adopted by a national standards body and made available to the public. (ISO)

national standard: A standard promulgated by a national standards body (e.g., BSI, the British Standards Institution) and recognized as applicable to goods and services within a particular nation; it may or may not be mandatory. (EIPSC)

23. <u>harmonized standard</u>: Standards on the same subject approved by different standardizing bodies, that establish interchangeability of products, processes and services, or mutual understanding of test results or information provided according to these standards. (ISO)

24. <u>voluntary standards</u>: Standards established generally by private sector bodies and that are available for use by any person or organization, private or governmental. The term includes what are commonly referred to as "industry standards" as well as "consensus standards," but does not include professional standards of personal conduct, institutional codes of ethics, private standards of individual firms, or standards mandated by law, such as those contained in the United States Pharmacopeia and the National Formulary, as referenced in 21 U.S.C. 351. (OMB)

voluntary standard: A standard which is usually developed by a consensus process for voluntary use and with which there is no obligation to comply. However, a voluntary standard may become quasi-mandatory, mandatory, as a result of its use, reference, or adoption by a regulatory authority. (EIPSC)

25. <u>quasi-mandatory standard</u>: A standard with which there is no legal obligation to comply, but which is required in practice or under certain conditions, such as a purchasing requirement or for compatibility with other products. (EIPSC)

26. <u>mandatory standard</u>: A standard with which there is an obligation to comply by virtue of an action by government or by an authority endowed with the necessary legal power; called a code, regulation, or rule. In addition to <u>how</u> a product must conform, a mandatory standard usually prescribes <u>who</u> must implement the standard, to <u>what</u> products the standard applies and under what conditions, and <u>when</u> conformance is required. It may also prescribe how conformance is to be established and may define exemptions and deviation procedures and may impose penalties for non-conformance. (EIPSC)

27. <u>de facto standard</u>: A standard which has not been promulgated and adopted but has come into use by general acceptance, custom or convention; may or may not be described in a published document. (EIPSC)

28. <u>performance standard</u>: A standard which prescribes the acceptable functional or operational characteristics of a material, product or system, related to the circumstances of use to which the performance applies; includes or references the test methods by which these characteristics are measured. (EIPSC)

29. <u>design standard</u>: A standard which describes how a required performance can be achieved by prescribing the physical or dimensional characteristics of a product or system and its manufacture, construction or fabrication; can describe a product which has been determined by product test to be in conformance with a prescribed set of performance standards. (EIPSC)

30. <u>industry standard</u>: A standard developed and promulgated by representatives of an industry for materials and products related to that industry. An industry standard is generally oriented towards the industrial or institutional consumer and represents a consensus of the industry regarding the nomenclature, identification, standard sizing, and material, design or performance specifications for materials and products of that industry. (EIPSC)

31. <u>company standard</u>: A standard applicable to the design, manufacture, quality control, testing, installation or servicing of products and services of a particular industrial organization. A company standard typically reflects implementation of industry or other standards and tends to be mandatory within the company; may be identified as an XYZ corporate standard, division standard, plant standard, manufacturing standard, etc. (EIPSC)

32. <u>proprietary standard</u>: A standard developed by a commoninterest group and not generally promoted for use by the public. Company standards and many industry standards are generally considered to be proprietary standards. (EIPSC)

33. <u>government standard</u>: A standard developed, adopted or promulgated by a Federal, State or local government agency. A government standard is generally mandatory as applied to government procurements or when adopted as a code, regulation or rule by a regulatory authority. (EIPSC) 34. <u>Federal standard</u>: A standard promulgated by the Federal Supply Service, General Services Administration, pursuant to the Federal Property Management Regulation 101-29.103 (41 C.F.R. 101-29.103) and applicable throughout the Federal Government. Federal standards provide standard data and test methods for reference in federal specifications and identify standard items for use in the Federal Supply Service. (EIPSC)

35. Federal Information Processing Standard: A standard developed by the National Institute of Standards and Technology, adopted and promulgated by the Department of Commerce, under the provisions of Public Law 89-306. Federal Information Processing Standards are applicable to federal information processing installations and government procurement of information processing equipment. They are generally mandatory in nature. (EIPSC)

36. <u>military standard</u>: A mandatory standard developed and issued by the Department of Defense, used solely or predominantly for military activities. (EIPSC)

37. <u>specification</u>: A set of conditions and requirements, of specific and limited application, that provides a detailed description of a procedure, process, material, product, or service for use primarily in procurement and manufacturing. Standards may be referenced or included in a specification. (EIPSC)

<u>specification</u>: A document prepared specifically to support acquisition which clearly and accurately describes the essential technical requirements for purchased material. Procedures necessary to determine that the requirements for the purchased material covered by the specification have been met shall also be included. (DOD)

38. <u>technical specification</u>: Document that prescribes technical requirements to be fulfilled by a product, process or service. (ISO)

39. <u>Federal specification</u>: A specification promulgated by the General Services Administration, Federal Supply Service, pursuant to Federal Property Management Regulation 101-29.103 (41 C.F.R. 101-29.103). It describes essential and technical requirements for items, materials, or services to be bought by the Federal Government. (EIPSC)

40. <u>military specification</u>: A specification developed and issued by the Department of Defense and used solely or predominantly for military procurements and in Department of Defense contracts. (EIPSC) 41. <u>code</u>: A collection of mandatory standards which has been codified by a governmental authority and thus become part of the law for the jurisdiction represented by that authority. (EIPSC)

42. <u>code of practice</u>: Document that recommends practices or procedures for the design, manufacture, installation, maintenance or utilization of equipment, structures or products. (ISO)

43. <u>regulation</u>: Document providing binding legislative rules, that is adopted by an authority. (ISO)

<u>regulation</u>: A standard or set of conditions and requirements which have been declared mandatory by a regulatory authority. (EIPSC)

44. <u>model code</u>: A standard, a collection of standards or other set of conditions and requirements that is recommended for adoption by regulatory authorities as a legal code. (EIPSC)

<u>model code</u>: A proposed code that is established within the procedural framework of a group of knowledgeable people, and is designed for adoption by governmental authority. (ASTM-E631)

45. <u>superseded document</u>: A document which for new design of equipment is replaced by a new document or a revision to the existing document. It does not imply cancellation unless a specific notice of cancellation has been issued. (DOD)

#### PART III TESTING AND CERTIFICATION

46. <u>test</u>: Technical operation that consists of the determination of one or more characteristics of a given product, process or service according to a specified procedure. (ISO)

testing: The determination, by technical means, of the properties, performance, or elements of materials, products, services, systems, or environments, which may involve application of established scientific principles and procedures. (ASTM-E699)

47. <u>test method</u>: Specified technical procedure for performing a test. (ISO)

48. <u>test report</u>: Document that presents test results and other information relevant to a test. (ISO)

49. <u>interlaboratory test comparisons</u>: Organization, performance and evaluation of tests on the same or similar items or materials by two or more laboratories in accordance with predetermined conditions. (ISO)

NOTE: Specific, well-defined interlaboratory test comparisons are sometimes referred to as "round robin tests." (OSCI)

50. <u>proficiency testing</u>: Determination of laboratory testing performance by means of interlaboratory test comparisons. (ISO)

51. <u>validation</u>: The process of determining the correctness of a standard as to its technical completeness and lack of ambiguity. (IEEE)

52. <u>conformance</u>: The state of having satisfied the requirements of some specific standard(s) and/or specification(s). (IEEE)

NOTE: "Conformance" is used with respect to voluntary standards and specifications, whereas "compliance" is used with respect to mandatory standards and regulations. (OSCI)

53. <u>conformity</u>: Fulfillment by a product, process or service of all requirements specified. (ISO)

54. <u>verification</u>: The process of determining whether an implementation is in conformance with some specific standard(s) and/or specification(s). (IEEE)

55. <u>compliance</u>: Adherence to rules, regulations or other requirements. (IEEE) (See NOTE under "Conformance.")

56. <u>certification</u>: The act of issuing a warranty, certificate, or mark or other appropriate evidence that attests that a product or service conforms to specific standards or specifications. (ILAC)

<u>certification</u>: The process by which recognition is obtained from an appropriate party that a product meets certain specified requirements. Prototype or production models, or both, of the product(s) will have been tested and inspected to check that they do meet the requirements. Quality assurance programs are used to assure that the product(s) continue to comply with the specified requirements. Satisfactory tests, inspections, and quality assurance are for the basis for certification. Certification may be evidenced by labeling of the product. (ASTM-E699) <u>certification</u>: The process of granting, by an authorized body, a statement of compliance, which may have legal ramifications, of some product(s), process(es), or service(s) to specific standard(s) or specification(s) requirements. (IEEE)

57. <u>certification system</u>: System that has its own rules of procedure and management for carrying out certification of conformity. (ISO)

<u>certification system</u>: The organizational and procedural process or the institutional mechanism for accomplishing product certification. (EIPSC)

58. <u>certification scheme</u>: Certification system as related to specified products, processes or services to which the same particular standards and rules, and the same procedure, apply. (ISO)

59. <u>certification body</u>: Body that conducts certification of conformity. (ISO)

certification body: An impartial body possessing the necessary competence and other qualifications to sponsor and operate a certification program. A certification body is that organization under whose authority a certification program is developed, promulgated, operated, and financed, and with whose name the certification program is identified. (ANSI)

60. <u>third-party certification</u>: A form of certification in which the producer's claim of conformity is validated (reviewed and verified) as part of a third-party certification program, by a technically and otherwise competent body other than one controlled by the producer or the buyer. (ANSI)

61. <u>self-certification</u>: A form of certification by a producer, on its own authority and not under the procedures of a thirdparty certification program, that a product or service is in compliance (conformity) with the designated standards or specifications. (ANSI)

62. <u>certificate of conformity</u>: Document issued under the rules of a certification system, indicating that adequate confidence is provided that a duly identified product, process or service is in conformity with a specific standard or other normative document. (ISO)

<u>certificate of conformity</u>: A tag, label, nameplate, or document of specified form and content, affixed or otherwise directly associated with a product or service on delivery to the buyer, attesting that the product or service is in conformity with the referenced standards or specifications. (ANSI) 63. <u>mark of conformity</u>: Protected mark, applied or issued under the rules of a certification system, indicating that adequate confidence is provided that the relevant product, process or service is in conformity with a specific standard or other normative document. (ISO)

<u>mark of conformity</u>: The sign or symbol owned or controlled by the certification body that is used exclusively by the thirdparty certification program to identify products or services as being certified and is registered as a certification mark with the U.S. Patent Office under the Trade Mark Act of 1946. (ANSI)

64. <u>certification mark</u>: A symbol, logo, hallmark or other informative device adopted and authorized by a certification agency and affixed to a product to indicate that it conforms to or complies with the applicable or specified provisions of referenced standards, code or other requirements. (EIPSC)

65. <u>certification label</u>: A symbol, certification mark or other controlled mark or informative device affixed to a product to indicate that it conforms to or complies with the applicable or specified provisions of referenced standards, codes or other requirements. The label may also indicate approval by a specified organization or certification agency, that it has been tested and found to conform to or comply with the applicable requirements by an identified test facility, and/or that it is under the test and surveillance procedures of a specified certification system. (EIPSC)

66. <u>approved product</u>: A product which has been inspected, evaluated, tested, or otherwise determined to be in conformance or compliance with applicable or specified provisions of referenced standards, codes, or other requirements and approved by an organizational entity for its own procurement or purposes, or approved by a regulatory authority or governmental body for use within its realm of authority, or approved by a third party organization for use by other organizations. (EIPSC)

67. <u>certified product</u>: A product which has been inspected, evaluated, tested, or otherwise determined to be in conformance or compliance with applicable or specified provisions of referenced standards, codes, or other requirements and certified by an authority which is recognized or has the legal power to grant such certification. Certified products imply a guarantee or warranty of product conformance and that the product is under the test and surveillance procedures of a specified certification system. (NVLAP) 68. <u>qualified product</u>: A product which has been inspected, evaluated, tested, or otherwise determined to be in conformance with applicable or specified provisions of referenced standards, codes, or other requirements and approved for listing in a qualified product list (QPL). (EIPSC)

69. <u>qualified products list</u>: A list of products which have met the qualification requirements stated in the applicable specification, including appropriate product identification and test or qualification reference with the name and plant address of the manufacturer and distributor, as applicable. QPL is the accepted abbreviation for the term Qualified Product List. (DOD)

70. <u>pattern evaluation</u>: The examination of one or more measuring instruments of the same pattern which are submitted by a manufacturer to the national service of legal metrology; this examination includes the tests necessary for the approval of the pattern. (OIML)

NOTE: "Pattern evaluation" is also referred to as "type evaluation." (OSCI)

71. <u>pattern approval</u>: A decision taken by a competent state authority, generally the national service of legal metrology, recognizing that the pattern of a measuring instrument conforms to the mandatory requirements. (OIML)

NOTE: "Pattern approval" is also referred to as "type approval." (OSCI)

72. <u>provisional pattern approval</u>: An approval, for a limited period, of a pattern of measuring instrument in order to allow comprehensive and prolonged tests, under the normal conditions of use, of a sufficiently large number of instruments conforming to the pattern. (OIML)

> NOTE: The decision of approval can, if necessary, prescribe the number of instruments to be constructed, their place of installation and the verification accessories with which the instruments must be provided. (OIML)

73. <u>national type evaluation program</u>: A program of cooperation between the National Bureau of Standards, the National Conference on Weights and Measures, the States, and the private sector for determining, on a uniform basis, conformance of a type (of a measuring instrument) with the relevant provisions of National Bureau of Standards Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices"; and National Bureau of Standards Handbooks 105-1, 105-2, and 105-3 pertaining to reference standards and field standards used in weighing and measuring programs. (NTEP) 74. <u>type</u>: A model or models of a particular measurement system, instrument, element, or a field standard that positively identifies the design. A specific type may vary in its measurement ranges, size, performance, and operating characteristics as specified in the Certificate of Conformance. (NTEP)

## PART IV LABORATORY ACCREDITATION

75. <u>laboratory accreditation</u>: Formal recognition that a testing laboratory is competent to carry out specific tests or specific types of tests. (ISO)

> NOTE: The term "laboratory accreditation" may cover the recognition of both the technical competence and the impartiality of a testing laboratory or only its technical competence. Accreditation is normally awarded following successful laboratory assessment and is followed by appropriate surveillance. (ISO)

<u>laboratory accreditation</u>: A formal determination and recognition that a laboratory has the capability to carry out specific tests or types of tests. (ILAC)

<u>laboratory accreditation</u>: A formal determination and recognition that a laboratory has the capability to carry out a specific test(s) in accordance with a prescribed procedure(s). (NVLAP)

76. <u>laboratory accreditation system</u>: System that has its own rules of procedure and management for carrying out laboratory accreditation. (ISO)

<u>laboratory accreditation system</u>: A system having its own rules of procedure for evaluating, judging, and recognizing testing laboratories that have demonstrated a competency to conduct specific tests. Such systems include -- (1) initial assessment of all aspects of laboratory management and operation by panels of expert assessors; (2) reassessment at prescribed intervals; and (3) proficiency testing programs on a regular basis. (ILAC-2)

77. <u>laboratory accreditation body</u>: Body that conducts and administers a laboratory accreditation system and grants accreditation. (ISO)

NOTE: An accreditation body may wish to delegate fully or partially the assessment of a testing laboratory to another competent body (assessment agency). While it is recognized that this may be a practical solution to extending recognition of testing laboratories, it is essential that such assessment be equivalent to that applied by the accreditation body and that the accreditation body take full responsibility for such extended accreditation. (ISO)

78. <u>laboratory accreditation agency (authority)</u>: An organization which conducts and administers an accreditation system in order to evaluate, judge, and convey in an appropriate manner that testing laboratories are competent to conduct specific tests. (NVLAP)

79. <u>laboratory accreditation administrator</u>: A person or organization that performs the executive duties required to manage a laboratory accreditation program. (NVLAP)

80. <u>laboratory evaluation (assessment)</u>: Examination of a testing laboratory to evaluate its compliance with specific laboratory accreditation criteria. (ISO)

<u>laboratory evaluation (assessment)</u>: The decision-making process, using information from laboratory examinations, whereby a laboratory's testing capability is assessed for conformance with general and specific criteria. Laboratory evaluation may be a basis for accreditation. (NVLAP)

81. <u>laboratory evaluator (assessor)</u>: Person who carries out some or all functions related to laboratory assessment. (ISO)

<u>laboratory evaluator (assessor)</u>: An individual of recognized professional competence and impartiality who assesses personnel, physical resources, testing procedures, and the quality assurance program of a laboratory to determine its compliance with specific laboratory accreditation criteria or requirements. (ILAC)

82. <u>laboratory evaluation criteria</u>: Statements prescribing the organizational and technical resources, the equipment and facilities, the operational procedures, and the minimum technical, managerial and ethical performance levels usually required of a testing laboratory for accreditation purposes. (NVLAP)

83. <u>laboratory evaluation methodology</u>: Statements prescribing the process or procedures by which the organizational and technical resources of a test facility shall be examined and reported to an accreditation agency for a specific product test. (EIPSC)

84. <u>monitoring</u>: The act of periodically observing or reviewing the functioning and proficiency of a laboratory or a certification program. (NVLAP) 85. <u>evaluating</u>: The function of obtaining data developed by a testing agency, and utilizing such data to perform calculations, determine suitability, project results, or otherwise draw conclusions resulting from an analysis of these data. (ASTM-E699)

## PART V QUALITY CONTROL

86. <u>quality</u>: The totality of features and characteristics of a product or service that bear on its ability to satisfy given needs. (ASQC)

87. <u>quality assurance</u>: A planned system of activities whose purpose is to provide assurance that the overall quality control program (see quality control) is in fact being effectively implemented. This system involves a continuing evaluation of the adequacy and effectiveness of the overall quality control program with a view to having corrective action initiated where necessary. For a specific material, product, service, etc., this involves verification, audits, and evaluations of the quality factors that affect the specification, production, inspection, and use of the material product, service, system, or environment. (ASTM-E699)

<u>quality assurance</u>: All those planned or systematic actions necessary to provide adequate confidence that a product or service will satisfy given needs. (ASQC)

88. <u>quality control</u>: A planned system of activities whose purpose is to provide a level of quality that meets the needs of users; also, the use of such a system. The objective of quality control is to provide an overall system integrating the quality factors of several related steps including: the proper specification for what is wanted; production to meet the full intent of the specification; inspection to determine whether the resulting material, product, service, etc., is in accord with the specification; and review of usage to determine necessary revisions of the specification. (ASTM-E699)

89. <u>approved quality control program</u>: A quality control program which has been approved by a regulatory authority, a certification agency or other user and accepted as fulfilling user needs for product conformance testing for a specific product. In addition to specifying requirements for the inspection, evaluation or testing of a product, an approved quality control program may include requirements for the maintenance, availability, or submission of quality control records and may prescribe specific sampling plans and procedures. (EIPSC) 90. product qualification testing: The initial product test and analysis of a new product design or modification of a product design. Product qualification tests are the basis for the initial acceptance of a product as an approved or accepted product, approval as a certified product, or listing as a qualified product in a qualified product list (QPL) or as a product which has been granted type approval. (NVLAP)

91. <u>inspection</u>: The process of measuring, examining, testing, gaging or otherwise comparing the unit with the applicable requirements. (ASQC).

NOTE: The term "requirements" sometimes is used broadly to include standards of good workmanship. (ASQC)

92. <u>recognition arrangement</u>: Agreement that is based on the acceptance by one party of results, presented by another party, from the implementation of one or more designated functional elements of a certification system. (ISO)

NOTE: Typical examples of <u>recognition arrangements</u> are testing arrangements, inspection arrangements and certification arrangements. (ISO)

recognition arrangement: a formal written agreement between two (or more) parties (e.g., companies, organizations or national governments) to accept test data, the determination of product conformance to standards, product certification results, and/or the accreditation of laboratories to perform specific tests and issue certification certificates. (OSCI)

93. <u>unilateral arrangement</u>: <u>recognition arrangement</u> that covers the acceptance of one party's results by another party. (ISO)

94. <u>bilateral arrangement</u>: <u>recognition arrangement</u> that covers the acceptance of each other's results by two parties. (ISO)

95. <u>multilateral arrangement</u>: <u>recognition arrangement</u> that covers the acceptance of each other's results by more than two parties. (ISO) Index

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