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NBS PUBLICATIONS



NBSIR 82-2523

A Bibiliography on Laboratory Accreditation

U.S. DEPARTMENT OF COMMERCE National Bureau of Standards Washington, DC 20234

April 1982

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A BIBILIOGRAPHY ON LABORATORY ACCREDITATION

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James Bryson Lisa Drake Wiley Hall Douglas Thomas

U.S. DEPARTMENT OF COMMERCE National Bureau of Standards Washington, DC 20234

April 1982

Prepared for The International Laboratory Accreditation Conference (ILAC)





A BIBLIOGRAPHY ON LABORATORY ACCREDITATION

FOREWORD

Increased emphasis is being placed on insuring the validity of laboratory test results for realizing equity in the marketplace, for industrial product quality control, for equitable enforcement in effecting compliance with government regulations and for use in scientific research. Consequently, over the past few years, a concerted effort has developed to identify laboratories that are competent in the areas for which they conduct tests.

For many years government purchasing authorities and large industrial consumers have operated various forms of laboratory approval systems using procedures for assessment ranging from "none" to "excessive demands" in order to provide assurance that the items purchased meet specifications. Recently, these efforts have started to evolve into more organized and effective assessment procedures for determining a laboratory's competence (the system now referred to as "laboratory accreditation"). The term "laboratory accreditation" has gained broad acceptance as meaning a formal recognition that a laboratory is competent to carry out specific tests or types of tests.

In addition to the pressure from individual consumers for assuring quality products within a country, a major driving force for the development of national laboratory accreditation systems is the potential use of test data from credible laboratories to facilitate international trade. The complexity of modern society is influenced as much by trade interdependence as by the sophistication of the products being traded. Market shares for many products in almost all countries are shifting each year. Consumers frequently see new sources for both familiar and new products. The reliance on product testing helps assure that products from new sources are acceptable in new markets; however, in order to assure that the products meet the requirements or the specifications in the receiving country, there is often a preference that testing of those products be conducted in the receiving country rather than in the exporting country. At present, recognition of accredited laboratories seldom extends beyond national boundaries, and there is widespread reluctance to accept tests carried out in other countries. This attitude leads to duplication of tests, resulting in significant barriers to trade.

The International Conference on Laboratory Accreditation (ILAC), which seeks to obtain recognition of national programs for the accreditation of testing laboratories, was formed in 1977 to facilitate international trade in products or services for which reliable reports of test data are needed prior to their importation and/or exportation. At the third ILAC Conference in

Sydney (1979), considerable discussion centered on channels of communication to promote and accommodate the exchange of information on laboratory accreditation systems and the attending technologies. Having decided during the preceding ILAC Conference in Washington (1978) to promote the development of a directory of national testing arrangements and testing laboratory accreditation systems, the Conference took an additional step to enhance the exchange of information concerning laboratory accreditation systems. A resolution was passed stating "That ----- a Task Force be established to prepare a bibliography of published information of interest to organizations operating or considering establishment of testing laboratory accreditation systems." The National Bureau of Standards (NBS) of the United States was requested to undertake this task. NBS, highly interested in laboratory evaluation technology and accreditation systems, agreed to develop the bibliography with the cooperation of the conference delegates.

James O. Bryson

ACKNOWLEDGEMENT

Individuals in 16 countries responded to the request for references to published documents for inclusion in this bibliography. Preparing the bibliography was accomplished by the authors, who are responsible for the compilation. Responsibility for its comprehensiveness must be shared with its contributors.

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INTRODUCTION

This bibliography was prepared by the U.S. National Bureau of Standards at the request of and in cooperation with the International Laboratory Accreditation Conference (ILAC). The purpose of this work is to promote and accommodate the exchange of worldwide information concerning laboratory accreditation and related subjects.

A letter was sent to all delegates who had attended at least one of the ILAC Conferences through 1980; it requested submission of published material for inclusion in the bibliography. A total of 209 documents were received from 16 different countries.

The criteria for incorporation of material in the ILAC Bibliography on Laboratory Accreditation, as approved by ILAC are shown below:

Conditions for Entry

- The material to be included in the Bibliography must be published material (unrestricted distribution) from a government agency, organization, committee, or individual which operates or is associated with the operation of an accreditation system for the assessment of testing laboratories. The agency, organization, committee, or individual may represent or be affiliated with a national government, state government, local government, quasi-government body, private organization or business enterprise.
- 2. The agency, organization, committee, or individual stated in (1) need not be a member of or associated with ILAC.
- 3. Material submitted for the Bibliography may include documents promulgated by a defunct agency, organization or committee provided it complied with the criteria in (1) at the time it was operational.
- 4. For each item submitted for the bibliography, one copy of the document must be forwarded to NBS for retention in its files.

The bibliography is a compilation of annotated references to published information in several different languages. The titles of the referenced documents are presented in the language in which published, with English translations provided for non-English titles. All abstracts are in English.

The format for the bibliography is designed to facilitate the user's search for references to information by Country, by Subject Heading, and by Date of Publication - thus, a 3-part arrangement. In Part 1 (Country) the references are grouped under the organization(s) with which they are associated, such as the National Association of Testing Authorities (NATA) in Australia. The United States section is divided into 3 groups: Federal Government Agencies, State and Local Government Agencies, and Private Organizations. The references in each case give the title, author (if cited in the material), language of the document, date of publication, and a brief abstract of the information in the document. In Part 2 (Subject) the references, without annotation, are grouped by subject heading as presented under the Scope of the Bioliography. In Part 3 (Chronological Listing) the references, without annotation, are presented in the order of the date of publication.

The Scope of the Bibliography

Contents Cover the Following Categories:

- Programs, schemes, and systems. Conference proceedings.
- II.
- III. Directories.
 - IV. Histories of the organization.
 - ٧. Documented statutory authority for the system.
- Publications listings (catalogs) of accreditation organizations. VI.
- VII. Documented criteria for laboratory accreditation:
 - Eligibility (geographical, affiliation, etc.)
 - Test procedures
 - Test equipment С.
 - Personnel qualifications
 - Quality assurance (quality control, laboratory operations)
 - Laboratory records system
 - g. Laboratory management
- VIII. Published lists of laboratories approved by an accreditation organization.
 - IX. Annual reports.
 - Descriptive literature of the accrediting organization. Χ.
 - XI. Test methods and test procedures.
- XII. Accreditation program description by discipline or test method.
- XIII. Accreditation program procedural forms.
- Laboratory examination procedures. XIV.
- Laboratory examiner qualifications. XV.
- XVI. Examiner training.
- XVII. Proficiency testing procedures.
- XVIII. Determination of accreditation fees.
 - Principles of laboratory accreditation. XIX.

Part I

COUNTRY

Part I

COUNTRY

AUSTRALIA

National Association of Testing Authorities (NATA) 688 Pacific Highway, Chatswood, N.S.W., Australia 2067

Memorandum and Articles of Association of National Association of Testing Authorities, Australia

In English June 1957

> Abstract: The Memorandum and Articles of Association for the founding of the National Association of Testing Authorities.

Metallographic and Allied Tests

In English October 1962

> Describes the NATA requirements for registration of laboratories for metallographic and allied tests.

NATA Rules In English June 1974

Abstract: Provides detailed information on the Memorandum of Association, articles of Association and by-laws of NATA.

Acoustic and Vibration Measurement - Requirements for Registration In English

May 1976

Abstract: Describes requirements for NATA registration of laboratories in the field of Acoustic and Vibration Measurement. This booklet is published by direction of the Council, on the recommendation of the Acoustic and Vibration Measurement Registration Advisory Committee.

Report on Milk Powder Pilot Interlaboratory Test In English

October 1977

Abstract: The report covers the design, execution, results, statistical analysis of results and conclusions of a Pilot Interlaboratory Test on dried milk powders conducted during July 1977. The exercise was essentially a feasibility study to assess the viability and usefulness of establishing an ongoing program for testing of a broader range of dairy products.

Authorized Representatives of Registered Laboratories

In English June 1977

Abstract: The members of NATA are the members of the Council and the authorized representatives of registered laboratories. This list covers representatives as of June 1977. The role and responsibilities of authorized representatives are defined in the Associations Rules. Authorized representatives have the right to nominate and to be candidates for election to the Council and to vote in those elections.

NATA - A Progress Report - The First Twenty-five years In English

Abstract: Describes the formation and development of National Association of Testing Authorities from 1947 to 1972, the first 25 years.

Biological Testing

In English
January 1978

Abstract: The field covers examination for sterility, biological condition or effectiveness of cultures, foods, bactericides, insecticides, pharmaceuticals, cosmetics, waters, effluents and other materials and products. It includes tests in environmental biology, phycology, human and animal pathology, mycology and related disciplines.

Mechanical Testing

In English July 1978

Abstract: The mechanical testing field covers mechanical and related tests on materials, products and assemblies, climatic and durability tests, automotive and industrial safety tests, fluid mechanics, performance tests on tools and machinery, calibration of mechanical testing equipment, and metallography.

<u>International Conference on Recognition of National Systems for Accreditation of Testing Laboratories - First Report Task Force B</u>

In English February 1979

Abstract: The first report of Task Force B, ILAC Conference held in London in February 1979. The principal topic is the ILAC Directory of Laboratory Accreditation Systems.

NATA and Your Laboratory

In English July 1979

Abstract: This booklet explains some of the aspects of the organization and work of the NATA most likely to interest those proposing to seek accreditation of a laboratory.

The subjects discussed are connected with the administrative organization of the Association and the manner in which the Association deals with an application for registration. Technical aspects of requirements for registration are discussed separately in a series of booklets one for each field of testing in which registration is granted.

5

Metrology In English September 1979

Abstract: The field of Metrology is one of nine fields of testing in which NATA's laboratory accreditation system is currently organized.

The field covers engineering metrology, which deals with the determination of size, angle, shape and with the examination of instruments and machines used in such determinations, and also physical metrology which deals with such attributes as mass, volume and density and with the examination of instruments used in checking these attributes.

Acoustic and Vibration Measurement

In English January 1980

Abstract: The field covers those tests which require measurement and analysis of sound pressure levels and signals proportional to acceleration, velocity, and displacement. It includes measurement of environmental noise and mechanical vibration, calibration of acoustic and vibration measuring equipment, acoustic and vibration characteristics of materials and structures, audiometry, measurement of sound power, acoustic and vibration performance tests and dynamic balancing.

Heat and Temperature Measurement

In English
January 1980

Abstract: The field of Heat and Temperature Measurement covers those tests which require measurement of heat flow, temperature or humidity. It includes calibration of temperature or humidity measuring equipment, examples of heated enclosures, and tests on building materials and structures, fire prevention systems, etc.

A Directory of Laboratories Accredited by NATA

In English June 1980

Abstract: NATA Directory is a listing of NATA registered Laboratories in accordance with the types of products tested and the testing disciplines associated with each laboratory.

NATA Annual Report - Laboratory Accreditation is Indeed a Serious International Issue

In English

September 1980

Abstract: The NATA annual report for 1980 provides program information on registration of laboratories, advisory committees, member service, international cooperation, NATA staff, the ILAC conference, financial report, and the Director's statutory report.

Reliability, Accuracy, Consistency, Control In English

Undated

Abstract: Provides a general overview of the requirements for reliability, accuracy, consistency and control which are necessary for testing laboratories registered by NATA. A general description of the fields of testing is provided.

Australia's Laboratory Accreditation System

In English Undated

Abstract: The brochure briefly describes the NATA laboratory registration program and provides names and addresses for further information.

CANADA

Standards Council of Canada (SCC)
350 Sparks Street, Ottawa, Ontario, Canada, K1R 7S8

The Standards Council of Canada Act, Suppl. 1, Chapter 41 In English 1969-70

Abstract: The Act establishes the Standards Council of Canada. It defines the membership, objects and powers, organization, staff, financial, audit and reporting.

Certified Concrete Testing Laboratories

In English June 1978

Abstract: List of concrete testing laboratories certified by SCC as of June 1978. Also list the type of certification for which the lab has qualified.

National Standards System - Criteria and Procedures for Accreditation of Testing Organizations. CAN-P-4

In English June 1978

Abstract: This document records the generic criteria, requirements and procedures for all testing organizations seeking accreditation from the Standards Council of Canada.

Canada and International Standardization

In English January 1979

Abstract: The brochure briefly describes the SCC and its responsibilities in the area of international standards.

The National Standards Systems of Canada

In English July 1979

Abstract: The brochure describes briefly the components of the National Standards System: The Standards-Writing Organization, Testing and Certification Organization, International Standardization Organizations and Liaison Organizations.

Certified Welding Inspection Organizations

In English December 1979

Abstract: List of qualified Welding Inspection Organizations.
Organizations are certified according to product categories and Test
Methods. Product categories refer to certain applications such as
buildings, bridges, pressure vessels; while Test Methods include, visual,
radiographic, ultrasonic, magnetic particle, liquid penetrant, and
mechanical testing.

Annual Report 1979-1980

In English June 1980

Abstract: The tenth annual report of the Standards Council of Canada for the fiscal year 1979-1980 deals with the next phase in the evolution of Canada's National Standards System. Some of the keywords for the 1980's are certification, testing, harmonization, adoption of international standards, reference to standards, implementation of standards.

<u>Into the Second Decade - The National Standards System of Canada</u> (CAN-P-5A)

In English
October 1980

Abstract: A brochure which describes the Standards System, and the accomplishments since 1976.

The Standards Council of Canada

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In English November 1980

Abstract: The brochure describes the Council, its object, National and International relationships, Advisory Committees, Information Service and address.

Canadian Standards Association (CSA)

178 Rexdale Boulevard, Rexdale, Ontario Canada, M9W 1R3

Certified Concrete Testing Laboratories

In English June 1978

Abstract: List of concrete testing laboratories certified by CSA as of June 1978. Also, list the type of certification for which the lab has qualified.

Certified Welding Inspection Organizations (Canadian Welding Bureau, 254 Merton Street, Toronto, Ontario, Canada, M4S 1A9)
In English
December 1979

Abstract: List of qualified Welding Inspection Organizations. Organizations are certified by CWB according to product categories and Test Methods. Product categories refer to certain applications such as buildings, bridges, pressure vessels; while Test Methods include, visual, radiographic, ultrasonic, magnetic particle, liquid penetrant, and mechanical testing.

DENMARK

National Testing Board
Bredgade 31, DK-1260, Kobenhavn, K, Denmark (Copenhagen)

Lov nr. 144 af 21. marts 1973 som aendret ved lov nr. 45 af 11. februar 1976 om Statens Tekniske Provenaevn

("Act no. 144 of 21st March, 1973 as amended by Act no. 45 of 11th.")

In Danish

February, 1976

Abstract: The act provides the legal basis for the function of The Danish National Testing Board. It defines what by the act is understood by "technical testing". The act defines the Board's coordinating functions concerning technical testing in Denmark as well as the principal rules for the operation of the accreditation scheme as well as the basic criteria for accreditation. Further the act authorizes the Minister to appoint the members of the Board setting up special qualifications for membership and to issue relevant regulations for the activities of the Testing Board. By the act a general obligation of secrecy is imposed on all persons acting in the accreditation system.

The document is published in Danish, but will be available in English

translation on request.

Handelsministeriets bekendtgorelse nr. 77 af 24. februar 1976 om autorisation af laboratorier til at udfore autoriseret teknisk provning.

("Statutory order on accreditation of laboratories for the execution of

accredited technical testing.")

In Danish

Abstract: The order is issued by the Minister of Trade persuant to the Act on the Danish National Testing Board and lays down the conditions for the Testing Board in operating the accreditation scheme, e.g., application, assessment and monitoring procedures, general criteria for accreditation, requirements concerning test documents, secrecy, and liability covered by insurance. Finally specific regulations are set up for the Testing Board's withdrawal of accreditations.

The document is published in Danish, but will be available in English

translation on request.

Handelsministeriets cirkulaere nr. 56 af 22. marts 1976 om Statens Tekniske Provenaevn og dettes samarbejde med andre offentolige myndigheder og institutioner m.v.

("Circular of the Ministry of Trade no. 56 of 22nd March, 1976 on The Danish National Testing Board and its cooperation with other public authorities and institutions.")

In Danish

Abstract: The circular contains regulations of the cooperation between the Testing Board and other public authorities in the governmental sector. For example, all such public authorities are obliged to ask the opinion of the Testing Board when considering new legislation or new regulations requiring technical testing or setting up testing rules.

Statens Tekniske Provenaevn - register over autoriserede laboratorier - arligt.

("Danish National Testing Board - register of accredited laboratories.")

In Danish and English

Abstract: The register is published annually - normally end of January. The register contains thorough information on each accreditation issued with identification of the accredited laboratory, a specification of the field of testing in question, information on the approved signatories, a specification of the services offered by the laboratory under the accreditation, and a short description of special equipment used for testing according to the accreditation. The essential part of the information appears also in English.

Statens Tekniske Provenaevns arsberetning - arlig.

("The Danish National Testing Board - annual report.")

In Danish

Abstract: Up to 1979 the annual report of the Testing Board was published as part of the annual register. The annual report for 1980 as well as future reports will form a separate section of the annual report of the National Agency of Technology of the Ministry of Industry.

The annual report is available in Danish only.

Orientering om autorisationsordningen

("General Information on the Authorization Scheme.")

In Danish and English

Abstract: Contains information on the following items:

1. The Purpose of the Scheme.

2. The Need for the Scheme.

3. When May Authorization Be Granted?

4. Who May be Granted Authorization?

Definition of Testing Fields.

6. What Testing Methods Are Applicable?

7. How Applications for Authorization Are Considered.

8. What Are Laboratories Authorized To Do?

9. Requirements Applying to Technical Testing.

10. Checking and Supervision of Authorized Laboratories.

11. Duty of Laboratories to Execute Tests.

Hvad er autoriseret teknisk provning og hvorledes opnas autorisation?

("What is accredited technical testing and how is accreditation obtained?")
In Danish

In Danish

Testing of Electronic Equipment and Components

In English October 1980

Danish Research Center for Applied Electronics

Abstract: Description of facilities and types of testing performed on electronic equipment and component.

International Conference on Recognition of National Programs for Testing Laboratories
In English
October 1977

Program of the ILAC-77 Conference Abstract:

FRANCE

Organisation for Economic Co-operation and Development (OECD) 2 Rue Andre Pascal 75775 Paris Cedex 16, France

OECD Decision of the Council Concerning the Mutual Acceptance of Data in the Assessment of Chemicals (C(81) 30 (Final))

In French and English

May 12, 1981

Abstract: The Council: "decides that data generated in the testing of chemicals in an OECD Member country in accordance with OECD Test Guidelines and OECD Principles of Good Laboratory Practice shall be accepted in other OECD Member countries for purposes of assessment and other uses relating to the protection of man and the environment."

OECD Principles of Good Laboratory Practice

In French and English

May 12, 1981

Abstract: The OECD Principles of Good Laboratory Practice were adopted by the OECD Council on 12th May, 1981, in the form of an OECD Recommendation to Member countries (C(81) 30 (Final)).

Good Laboratory Practice (GLP) is concerned with the organisational process and the conditions under which laboratory studies are planned,

performed, monitored, recorded and reported.

Good Laboratory Practice is a concept of laboratory management and practice with the objective of maintaining and promoting the quality of test data. It should be emphasized that Good Laboratory Practice does not interface with the exercise of scientific knowledge.

These Principles of Good Laboratory Practice have been developed primarily for the testing of chemicals, but the broad principles could be

applied to any testing activity.

GERMANY

VDE Testing and Approvals Institute
Merianstrasse 28, D-6050 Offenbach/Main, Germany, F.R.

PM106 - Directions for the Approvals Procedure of the VDE-Prufstelle; The issue of licenses to use the Radio Protection Mark for electrical products according to VDE 0872 and VDE 0875.

In German

Abstract: Section 2 in this document describes the procedure for the accreditation of manufacturer's laboratories for the measurement of radio interference suppression of electrical products according to VDE 0872 and VDE 0875, i.e. radio and TV sets and household equipment. Published in the electrotechnical journal ETZ-B vol. 19, 1967. Reprinted several times with minor editorial amendments in the VDE series, VDE-Schriftenreihe No. 25 and 16.

Wie wird man anerkannter Hersteller für elektronische Bauelemente? ETZ-B Vol. 27, Peter Traugott ("How Does One Become a Recognized Manufacturer for Electrical Components")

In German

Abstract: In this paper the author describes how to become an approved manufacturer for electronics components within the harmonized quality assurance system for electronics components organized by the CECC (CENELEC Committee for electronic components).

Richtlinien für die Anerkennung und Bezeichung von Prüf-und Überwachungsstellen ("Guidelines for the Accreditation and Designation for Laboratories for Testing and Inspection")
In German
1974

Abstract: The document presents the rules for accreditation of test houses (labs) and supervising bodies in connection with the relevant Deutsches Institute fur Normung (DIN) standards.

Richtlinien für die Erteilung des DIN-Pruf. und Überwachungszeichens. ("Guidelines for the Distribution of the DIN Testing and Inspection Logo") Vom 1.1.1975

In German

Abstract: Rules for licensing laboratories for testing and supervision in accordance with DIN standards.

<u>DIN-Prüf-Überwachungszeichen.</u> Vom. 21. ("DIN Testing and Inspection Logo") In German May 1975

Abstract: Rules for licensing laboratories for testing and supervision in accordance with DIN standards.

Gesamtverzeichnis ("General Directory")

In German

1979

Abstract: Directory of labs accredited by Deutsche Gesellschaft fur Warenkennzeichnung Gmb H. The DIN standards and the products are also listed.

GREAT BRITAIN

National Testing Laboratory Accreditation Scheme (NATLAS)
Teddington, Middlesex, TW110LW

British Calibration Service Publications List

In English October 1979

Abstract: Booklet listing titles of all BCS publications, leaflets, and film, together with order form.

British Calibration Service Publications

In English

Abstract: A loose-leaf binder containing all BCS publications including copies of participation enquiry forms, application forms for approval, etc., general criteria for laboratory approval; criteria for approval in varaious fields of measurement and guidance publications. It is normally available only to BCS approved laboratories. Regularly updated.

British Calibration Service Directory

In English

Abstract: A loose-leaf binder containing full details of each laboratory approved by BCS. Includes detailed schedule of the measurements for which each laboratory is approved together with the related best measurement capability. Individual schedules and index etc., are regularly updated. Available on subscription.

British Calibration Service - List of Approved Laboratories

In English

May 1980-April 1981

Abstract: A booklet with addresses, telephone and telex numbers of all BCS Approved Laboratories. Includes names of Heads of Laboratory and their Deputies and fields of measurements for which the laboratories are approved.

About the British Calibration Service

In English March 1978

Abstract: Leaflet aimed at answering the questions of prospective approved laboratories. Available in English and translated into 17 other languages.

British Calibration Service - Annual Report 1978

In English
January 1979

Abstract: Reports on the names and activities of BCS staff and technical panels during the year together with the number of certificates issued and measurement audits completed and the titles of publications issued.

NATLAS - National Testing Laboratory Accreditation Scheme

In English April 1981

Abstract: A prospectus describing the NATLAS.

National Testing Laboratory Accreditation Scheme (NATLAS) To Be Launched

In English
May 13, 1981

Abstract: A press notice from the Department of Industry announcing the start of the NATLAS on October 22, 1981. It includes a description of the scheme.

NATLAS Accreditation Standard-Criteria of Competence To Be Met By Testing Laboratories

In English May 1981

Abstract: The document describes the requirements for Testing Laboratories, irrespective of the different technologies involved; it covers their organization, staff qualifications, accommodation, test equipment, calibration, record keeping, and the issuing of reports. Additional requirements may be specified by the Accrediting Authority depending upon the specific character of the task of the Testing Laboratory.

NATLAS Regulations-Regulations To Be Met By Testing Laboratories In English

May 1981

Abstract: The granting, maintenance, and renewal of accreditation will be afforded only to Testing Laboratories which comply with these Regulations and the relevant criteria of competence specified by NATLAS.

NATLAS Assessor Acceptability Standard-Criteria To Be Met By Laboratory Assessors

In English
May 1981

Abstract: The aim of this document is to set out criteria for the acceptability of personnel required to undertake Testing Laboratory Assessments. The document describes the criteria for Assessors and Lead Assessors, irrespective of the technologies involved. Additional or alternative criteria may be specified by the Accrediting Authority, depending upon the specific character of the Testing Laboratory to be assessed.

Proposed Basis of Operation of the Scheme as Endorsed By the Advisory Council on Calibration and Measurement

In English

February 26, 1981

Abstract: A report of the Steering Committee on the purpose, aims, and procedures of NATLAS.

The Conduct of NATLAS Assessments (Draft)

In English May 1981

Abstract: Information giving general guidance to assessors on how to carry out an assessment and to provide information on the conduct of assessments for testing laboratories. (Draft)

Guidance for NATLAS Assessors (Draft)

In English May 1981

Abstract: This Guide is prepared for assessors and supplements the general guidance provided in the paper "The Conduct of NATLAS Assessments." It comprises a list of questions and topics which assessors might raise during the course of an assessment.

British Standards Institute (BSI)
Head Office, 2 Park Street, London, WIA2BS

System for the Registration of Test Houses of Assessed Capability In English Undated

Abstract: The working documents for the system for the Registration of Test Houses of Assessed Capability. The six parts set out certain requirements, compliance with which will enable a firm to be listed in the BSI Register, and general information on the operation of the system.

Names and Address of Those Test Houses Registered by BSI In English

The Categories for which each of the Accredited Test Houses are Assessed In English

Ministry of Defense - Procurement Executive The Adelphi John Adam Street, London, WCZN6BB

Quality Control Requirements for Test House and Laboratory Organizations In English

January 1, 1976 DEF STANO5-32/1

Abstract: The standard prescribes the minimum quality control requirements for test house and laboratory organizations which supply a service or testing, analysis, measurement or calibration, to ensure that such services conform to contract or purchase order requirements.

Lloyd's Register of Shipping & Industrial Services Directory, Croyden, England

Lloyd's Register of Shipping - Committee List, Staff List and Addresses of Offices
The English

In English July 1980

Lloyd's Register of Shipping - Annual Report 1979

In English April 1980

Abstract: Contains the annual Chairman's statement, World Shipbuilding Report, Technical Reports, Special Report: Keeping to Class by Computer; Around the World and the LR Committees.

The Magazine of Lloyd's Register of Shipping - 100Al

In English July 1980

Abstract: A copy of the regular monthly magazine of LRS for July 1980.

Computer Services of Lloyd's Register

In English 1979

Abstract: A brochure describing the computer services and facilities available to LR's clients.

<u>Lloyd's Register of Shipping - "Lloyd's Register Today"</u>

In English
January 1979

Abstract: A brochure describing the many services provided by Lloyd's Register of Shipping.

Lloyd's Register of Shipping - Lloyd's Register Industrial Services In English

October 1980

Abstract: A brochure which outlines LR's facilities for carrying out inspection of industrial plant and equipment, and indicates the scope of services available to clients.

<u>Lloyd's Register of Shipping - Lloyd's Register Offshore Services</u>

In English January 1979

Abstract: A brochure describing the classification and certification by Lloyds Register of all types of offshore equipment.

Lloyd's Register of Shipping - Extra Services for the Shipowner

In English August 1980

Abstract: A brochure describing the specification services of Lloyd's Register available to shipowner's. The services fall into seven categories:

Preparation of tender specs. for new ships Assessment of shipbuilder's tender proposals

Appraisal of constructural drawings Supervision during ship construction

Supervision during manufacturing and installation of marine equipment and machinery

Supervision during conversion or major repairs

Assessment of classification society records of existing ships

Approved Container Thermal Stations In English

undated

Approved Radiographic Establishments
In English
undated

INDIA

Department of Science and Technology New Delhi, 110012

Report of the Committee on National Testing Facilities

In English

December 1975

Abstract: A study and analysis of the various testing facilities in India and recommendations on the establishment of a National Testing and Calibration Service.

Commonwealth Science Council - Regional (Asia/Pacific) Metrology Programme

Directory of Calibration Services - CSC (79) MS-5

In English

August 1979

Compiled by: S. E. Belliss and J. H. Buckingham

Department of Scientific and Industrial Research, Physics and Engineering Lab.

Directory of Testing Facilities in India - 1980

Commonwealth Regional Metrology Programme

In English

Country Papers and Technical Papers - Presented at Regional (Asia/Pacific) Project Group Meeting on Collaboration in Measurement Standards, Nov. 21 - Dec. 2, 1977; New Delhi: Commonwealth Science Council, CSC (77) MS-2

Systems Approach to Standardization

Lal C. Verman and H. C. Visvesvaraya

In English

1976

Reprinted from ISI Bulletin, Vol. 28, No. 7, p. 280-286 and No. 8, p. 327-332 Abstract: Peering in the various facets of standardization and its application in different fields, the authors conceive standardization as a "system of systems" providing as it does the basic structure for all systems including industry, economy, manufacturing, arts, education, management, and social customs. They analyze various components and sub-components of standardization system and their interrelation and interaction with other systems, and present a fascinating overall systems view of standardization as also of the attributes of an ideal national standards system in keeping with a given set of parameters and objectives.

Integrated Plan for Standardisation in Electronics

S. L. Sarnot In English

January 1977

Electronics-Information and Planning, Vol. 4, No. 4

Abstract: This report describes an approach to standardization, testing and approval which needs to be followed to achieve the objective of producing high quality and cost competitve electronic items in India.

Report of the Panel on Guidelines for Standardisation in Electronics
In English
May 1977
Electronics-Information and Planning, Vol. 4, No. 8

Role of Precision Measurements in Standardization and Quality Assurance of Electronic Component and Equipment

K. Chandra In English 1980

Reprinted from Dr. Lal C. Verman Commemorative Issue of Journal of the Institution of Electronics and Telecommunication Engineers, Vol. 26, No. 8, 1980, p. 477-481

During manufacturing process, various types of measuring Abstract: instruments are employed for inspection of materials and compoents. inspection of parts during production and assembly, testing of sub-assemblies and final evaluation of industrial product. These measuring instruments have to be periodically checked against more accurate reference instruments of the factory which, in turn, are to be calibrated by recognized calibration laboratories. Several organizations are engaged in this important task of calibration and testing which is so vital for standardization and quality assurance. These organizations have been grouped into "Three Echelons" depending upon the level of accuracy of measurement. The National Physical Laboratory, New Delhi is the apex body in this system with statutory responsibility of establishment and maintenance of national standards of measurements and of providing calibration service at the highest accuracy in the country. The present status of Echelon I Standards of electronic measurements and calibration facilities available at N.P.L. are briefly reporting in this paper.

IRELAND

Institute for Industrial Research and Standards (IIRS). Dublin, Ireland Ballymum Road, Dublin 9, Ireland

Why We Must Accredit Testing Laboratories

In English

Conor O'Toole, Manager, International Affairs, IIRS Technology Ireland,

January 1980

Abstract: Rationale to support a program to accredit testing laboratories in Ireland and the economic importance to International Trade. Various fields of testing (disciplines) are proposed as a basis for establishing a laboratory accreditation program.

Irish Department of Agriculture

Scheme of Approval of Veterinary Laboratories as Approved Laboratories for the Examination and Certification of Specimens for Contagious Equine Metritis (CEM) In English

February 1979

Abstract: Criteria for the evaluation and certification of laboratories that test and certify specimens of Contagious Equine Metritis (CEM).

Application for the recognition of a laboratory as an Approved Laboratory for the bacteriological examination and certification of specimens for Contagious Equine Metritis (CEM)

In English

1979

Abstract: Application and certification for use by a laboratory that desires to be approved for the testing and certification of specimens of Contagious Equine Metritis (CEM).

Irish Department of Agriculture - Request for testing of specimen for Contagious Equine Metritis (CEM)

In English

1979

Abstract: Request form for owners of equines to request the testing and certification of specimens for Contagious Equine Metritis (CEM) by approved laboratories.

Irish Department of Agriculture - List of Approved Laboratories (CEM)
In English
1980

Abstract: List of approved labs for the bacteriological examination and certification of specimens for Contagious Equine Metritis (CEM).

ITALY Istituto Elettrotecnico Nazionale (IEN) "Galileo Ferraris" - Strada delle Cacce 91 10135 Torino, Italy Istituto di Metrologia "Gustavo Colonnetti," (IMGC), Torino, Italy

Struttura ed organizzazione di un laboratorio metrologico per l'esecuzione di misure dimensionali. ("The configuration and organization of a metrological laboratory for carrying out dimensional measurements.")

CANTA G., MOREI S., PANCIERA R., SARTORI S.

In Italian

Rivista di Meccanica, 29 (668), 1978: pp. 127 - 138.

Type: theoretical, survey.

Abstract: The requirements to be met by an industrial metrological laboratory in order to carry out its tasks within the framework of a national calibration service are discussed in this article. The subject is considered in general terms, but the examples supplied are taken from the sector of dimensional metrology. After defining the characteristics of first-level industrial standards, the AA, discuss the methods used to check laboratory capacities, which are differentiated in active and passive. The linking process that starts from the national primary laboratory and makes it possible to produce a sequence of measures, all mutually compatible, is finally analyzed in an attempt of process optimization, with the view of establishing a satisfactory relationship between measure uncertainty, cost, and a correct use of the existing means.

Primary and secondary calibration centres.

PERISSI R. In English

In: Proc. Insymet '78, Bratislava, 1978: pp. 107 - 116.

Abstract: Dissemination, at all levels, of the SI units is made possible only through comparison and certification of primary and secondary standards, mainly intended for industrial laboratories. Today in Italy, the study, realization, custody and dissemination of the standards of the SI units are the responsibility of primary metrological institutes, which work in the field of scientific metrology and coordinate this activity with that of the metrological laboratories in other countries. In the field of temperature metrology, there exist a number of industrial laboratories already working in strict cooperation with primary institutes. The analysis made in the text considers their conditions (sector of activity, measurement uncertainty, instrumentation, etc.), as well as personnel, equipment, time and financial requirements for the introduction of these laboratories, after approval, into a Calibration Service established with the express purpose of delegating calibrations and verifications of an industrial character to secondary Calibration Centres.

Ad un buon livello i laboratori metrologici Italiani. ("At a satisfactory level the Italian metrological laboratories.")

CANTA G., MOREI S., PANCIĔRA R., SARTORI S.

In Italian

Rivista di meccanica, 24 (662), 1978: pp. 51 - 61.

Type: experimental, survey.

The article collects the results of measurements made on length standards, with the view of giving a documentation of the traceability, at both national and international levels, of the measures produced in the field of dimensional metrology in Italy. The results of direct and indirect international comparisons of optical standards (crypton lamp and iodine stablized lasers) are supplied initially, though they were dealt with in previous publications. The possibility of correctly passing from optical standards to mechanical end--and line--gauges is documented by the satisfactory results of international audits on such standards, carried out by national primary laboratories. With mechanical standards, agreement between the Italian Metrology Institute and the corresponding British and Western Germany Institutes is ensured within uncertainties lying between 10^{-6} and 3 . 10^{-7} . The article finally gives and analyzes the measures obtained in industrial laboratories in Italy and in other European countries, within the framework of a comparison program. The comparison results, too, demonstrated that measures compatible with the reference values within the stated uncertainties can be produced by Italian laboratories.

Il servizio di taratura in Italia. ("About calibration service in Italy.")
PERISSI R., PASTA M.

In Italian

La Termotecnica, 33, 1979: pp. 154 - 155.

Type: survey.

Abstract: In 1977 IMGC and IEN (Istituto Elettrotecnico Nazionale), in their capacity as Primary Metrological Laboratories, started work for the approval of a number of industrial and public laboratories, with the final aim of establishing a National Calibration Service. Possible developments of this initiative are examined in the light of the procedures applied by other countries serving as examples. Expenditure and expected benefits for both the approved laboratory and the primary laboratory are also discussed.

Circolazione di campioni viaggiatori. ("The circulation of travelling standards.")

MARCARINO P., PERISSI R.

In Italian

In: Memorie del 34º Congr. Nazionale ATI, Palermo, 1979. Assoc. Termotecnica Ital., Sezione sicula, 1979, vol. 2, pp. 249 - 272.

Type: experimental, survey.

Abstract: Traceability to primary standards of the SI system units through transfer standards is the only solution that guarantees and safeguards the accuracy levels of the different secondary measurement laboratories. The article discusses the subject of the approval and reliability of the Calibration Centres of the Calibration Service in Italy, specific reference being made to transfer standards circulation. Mention is made of international audits, which also concern Italian laboratories, in the sector of thermometry, and the data of measurements carried out with a Pt thermoresistance standard, which for the first time was proposed and used by IMGC as an audit transfer standard, are analyzed more extensively.

Gli impianti per la taratura dei misuratori di portata ed il Servizio di Taratura in Italia. ("Flowmeter calibration facilities, and the Calibration Service in Italy.")
CIGNOLO G., RIVETTI A.

In Italian

In: Memorie del 34º Congr. Nazionale ATI, Palermo, 1979. Associaz. Termotecnica Ital., Sezione sicula, 1979, vol. 2, pp. 383 - 402.

Type: survey, experimental.

Abstract: After considering the increasing need for reliability and accuracy of flow measurements in different application sectors, the paper underlines the necessity for adequate calibration facilities capable of working with the same fluids as those used in instrument operating conditions. In consideration of the high cost of such facilities, attention is drawn on the importance of a careful estimate of benefits, disadvantages and attainable performances of each type: the main characteristics of the various types of calibration facilities are therefore described. They are classified according to the measurement method applied (absolute or comparison, weighing or volumetric methods), and according to the way of operation (static or dynamic methods; in the latter, fluids are measured when the facility is being run). In the same way as in any other metrological sector, it is essential that the accuracy of calibration facilities should be checked periodically against other analogous, or higher-accuracy, facilities through comparison cycles, in order to quarantee compatibility of field measurements carried out with the calibrated flowmeters. This exigency is particularly felt in the flow measurement sector, as in the calibration of a flowmeter there is the additional considerable contribution of an "uncertainty of interaction" between instrument and facility, that can be evaluated empirically only by mutual comparison of the calibration curves of the same standard instrument made by means of numerous different facilities. To meet the calibration requirements in fluid measurements, as well as in all the other metrological sectors and ensure moreover calibration reliability with verification and comparisons of the results of the different laboratories, in nearly all the industrial countries appropriate

interdisciplinary coordination bodies, the Calibration Services, are being organized, which are themselves starting comparisons and mutual international approval procedures. Finally, the paper supplies information on the Calibration Service in Italy (now in an advanced stage of organization) and, within the framework of this Service, on the IMGC facilities in the specific sector of flow measurements.

La metrologia scientifica ed i laboratori metrologici primari e secondari in Italia. ("Scientific Metrology and the Primary and Secondary Metrological Laboratories in Italy.")

EGIDI C. In Italian

IENGF - R. T. 274 febbraio 1980. Atti del XXI Congresso Nazionale AIRT, Palermo 16-19 Ottobre 1979.

Type: survey.

Abstract: The paper is devoted to an audience of scientists working in the field of ionizing radiations, most of them not particularly concerned with metrology. Scientific and legal metrology: the basic date of 20th May 1975 is recalled, when the Meter Convention was signed in Paris. The Decimal Metric System and its evolution are remembered, through the MKSA or Giorgy System, up to the present "SI." The basic units of the System and the derived units are commented, as deduced from the list of relevant Italian Standard "Norma CNR-UNI 10003-74": in particular, the units for ionizing radiations are recalled. Changes to be expected soon and in the near future are outlined. About the increasing importance of ionizing radiations, resolution proposed and accepted at the 16th C.G.P.M. (Paris, 8-12, October 1979) is mentioned. Concerning dissemination of units, the metrological structure in progress in Italy is explained, based on four primary metrological institutes and on the network of secondary laboratories approved and in progress of approval.

Procedures for the Approval of A Calibration Centre

Arri, E.,; Perissi, R.

In English October 1980

Abstract: Paper presented at INSYMET.'80, Bratislava, Italy

REPUBLIC OF KOREA

Industrial Advancement Administration (IAA) Ministry of Commerce and Industry Yeong Deung PO, Seoul, Korea

Export Inspection Law In English 1975

Abstract: The Export Inspection Law was promulgated in 1962 to encourage export industries to improve the quality of export goods and to maintain good reputation overseas.

The Industrial Advancement Administration - Annual Report 1980 In English

Abstract: The goods, import, export and domestic, to be inspected are designated by the IAA, which is under the Ministry of Commerce and Industry. The laboratories engaged in the testing and inspection of goods are authorized after accreditation by IAA when the laboratory applies for inspection testing of its interest.

MEXICO

National Testing Laboratories Accreditation System
National Bureau of Standards
Ministry of National Resources and Industrial Development
Tuxpan 2, 70. Piso, Mexico 7, D.F.

Sistema Nacional De Acreditamiento De Laboratorios De Pruebas ("Decree establishing the National Testing Laboratories Accreditation System") In Spanish

Abstract: In general terms, contains the basic principles which gave birth to the system, its organization by industrial branches and test fields, the instruments of support, its operating form, the requirements that a laboratory must comply with in order to be accredited and sanctions for their unfulfillment, rights and fees to finance the system.

Operating Organization Includes:

- Standardization Testing Laboratories Committees, by industrial branches and test fields.
- Standardizers, experts in their respective scientific areas.
- Accredited Testing Laboratories.

Bases de Operacion del Sistema Nacional de Acreditamiento de Laboratorios de Pruebas ("Operation Bases of the National Testing Laboratories Accreditation System")

In Spanish

Abstract: It establishes the bases for the performance of the system and broadens the operating organization stated in the decree, limiting the committees and standardizers functions. It sets forth the way to constitute the committees and the eligibility of their members, as well as the selection of the standardizers.

Boletin Informativo SINALP No. 1/80 ("SINALP Bulletin No. 1/80") In Spanish

Abstract: It explains some organizational and work features of the National Testing Laboratories Accreditation System. It presents the kind of organization of the system and its constituent parties, the purposes of its establishment, its attribution and regulations, the persons responsible, an outlire of its structure, the organisms of support, the technical activities, industrial branches and test fields. It gives a general view of the costs produced by the procedures and granting of accreditation, the people who decide upon it and to whom it has to be paid and explains the procedures to request the accreditation.

Boletin Informativo SINALP No. 2/80 ("SINALP Bulletin No. 2/80") In Spanish

Abstract: It presents detailed information about the rights and fees a testing laboratory must pay to be accredited, to whom they must be paid and the total amount. It provides a classificatio of the different kind of taxes, fees and other forms of financing the system. It includes an indicative table of the rates in taxes and fees. This bulletin can be modified at anytime.

Boletin Informativo SINALP No. 3/80 (SINALP Bulletin No. 3/80")
In Spanish

Abstract: It establishes the bases for the criteria of selection to assure that the work performed by a testing laboratory is reliable, and describes the requirements that in relation to its operation a testing laboratory must fulfill in order to be accredited. It includes: organization, personnel, analysis equipment, equipment calibration, operating procedures, the provision of special cases as those of security, handling of samples, record of data and results report, and environmental aspects.

Solicitud de Acreditacion y Anexo-Requisitos de Informacion para solicitor acreditamiento ("Accreditation Application and Annex. Information Requirements to ask for Accreditation")
In Spanish

Abstract: It sets forth the official form in which the accreditation application has to be presented by the laboratories that want to be accredited and annex with the specification of all the papers to be presented to the accreditation authority: organization, personnel, facilities, equipment, maintenance, calibrations, test methods, laboratory operation and general information.

Sistema NACIONAL DE CALIBRACION National Calibration System

<u>Decreto que establece el Sistema Nacional de Calibracion</u> ("Decree establishing the National Calibration System")

In Spanish

Abstract: It establishes the basic principles which originated the system, an outline of its organization by the branches of metrology, its operating structure, the requirements a laboratory must fulfill to be authorized, the classification of measurement standards, sanctions for the unfulfillment of obligations and the rights and fees to finance the system.

Its operating organization includes:

- Standardization Measurement Laboratories Committees for each of the branches of metrology.
- Authorized Measurement Laboratories.
- Chain of Standards Transference.

NEW ZEALAND

Testing Laboratory Registration Council (TELARC) 272 Parnell Road, Auckland, New Zealand

The Testing Laboratory Registration Act of 1972 - N.Z. Government In English

Abstract: An Act to make provision for the registration of testing laboratories and for that purpose to provide for the establishment of a Testing Laboratory Registration Council and to define the powers and functions of Council.

TELARC Operational Guidelines

In English

1974

Abstract: First published description of organization and method of operation of TELARC.

Reports of the Testing Laboratory Registration Council of New Zealand. (for the 15 months ended 31 March 1974 and for the years ended 1975, 1976, 1977, 1978, 1979 and 1980.)

In English

Abstract: Reports presented to the New Zealand House of Representatives on the activities of the Testing Laboratory Registration Council of New Zealand.

Criteria for Registration - TELARC various

In English

Requirements for registration in chemical testing - 1974
Requirements for registration in electrical testing - 1974
Requirements for registration in mechanical testing - 1974

Quality New Zealand - Organized by New Zealand Organization for Quality Assurance

In English

Abstract: Proceedings of a symposium, Auckland 18 April 1978

1978 TELARC Soil Testing Symposium - Wednesday, 29 November 1978 In English 1978

Abstract: Proceeding; of a symposium presenting aspects of registration for soil testing laboratories.

The Accreditation of Testing Laboratories in New Zealand - M. R. Bell New Zealand Engineering (33, 11)
In English
November 1978.

New Zealand's registered engineering laboratories - J. C. Wydenbach New Zealand Engineering (34, 3) In English March 1979

TELARC Index 1979

In English

Abstract: An index of laboratories registered by TELARC.

TELARC Talk In English

Abstract: The Newsletter of the Testing Laboratory Registration Council of New Zealand. Issues Number 3 to 7 (Oct. 1978 - Nov. 1980).

Laboratory Accreditation in New Zealand, Part 1 General Criteria for Registration

In English

1980

Abstract: Describes the organization and method of operation of the TELARC program of testing laboratory accreditation.

Laboratory Accreditation in New Zealand, Part 2 Specific Criteria for Registration in Biological Testing

In English

Provisional Criteria for Registration in Medical Testing

In English

TELARC Technical Notes

No. 1 A users quide to the calibration requirements of laboratory balances

No. 2 Testing of water and waste water

No. 3 Testing of soils

No. 4 Nondestructive testing

No. 5 Interpretation of radiographs

In English

What is TELARC - K. F. Cooper

In English

Abstract: Paper published by Association of Sewage Works Managers of New Zealand.

SOUTH AFRICA

South African Bureau of Standards (SABS)
Head Office, 1 Dr. Lategan Road, Groenkloof, Pretoria 0001

Principles and Procedures for the Accreditation of Civil Engineering
Laboratories (Proposed second draft for comment)
In English

In English undated

Abstract: Covers the principles and procedures for the evaluation and accreditation of laboratories involved in the measurement of the chemical, physical and performance characteristics of civil engineering materials, as instituted by the SABS.

Functional Breakdown and Constitution of Committees CELAC/C.C./l In English

Abstract: Gives the functional breakdown of the committee structure for the system of laboratory accreditation of civil engineering laboratories (CELAC).

SWEDEN

Swedish National Authority for Testing, Inspection and Metrology (Statens Provningsanstalt (SP)) Box 857, S-501 15, Boras, Sweden

We Check for Safety in Sweden

In English 1979

Abstract: A brochure which describes the system of official testing in Sweden.

Official Testing in Sweden

In English April 3, 1981

Abstract: At present, the official testing activities in Sweden are being reorganized. The reorganization follows the guidelines authorized by the government in 1972 and 1974. It shall lead to a clear distribution of responsibility, an effective use of available resources and guarantees of impartiality. A number of National Testing Agencies will be established to carry out the official testing. Statens provningsanstalt (SP)--the Swedish National Authority for Testing, Inspection and Metrology--is responsible for the planning and execution of the reorganization.

History of the Organization In English

In English April 1981

Abstract: Describes the general authority of the Statens provningsanstalt since 1972 and gives the documented statutory authority for the system. It contains the directions for National Testing Agencies issued in 1978. A list of the Register of Fields of Objects and National Testing Agencies is also included in the document.

UNITED STATES

Federal Agencies

Department of Agriculture (DoA) Washington, District of Columbia

Federal Grain Inspection Service (FGIS) United States Grain Standards Act, as Amended

Final amendment dated September 1977

Abstract: The Act provides for U.S. standards and a national inspection and weighing system for grain and for other purposes.

<u>Grain Standards</u> - Federal Register. Vol. 45, No. 49, 15802 In English March 1980

Abstract: The Federal Grain Inspection Service published these final regulations to implement the U.S. Grain Standards Act, as amended, in 1976 and 1977.

Federal Grain Inspection Service List of Designated Official Agencies and Chief Inspectors
In English
April 1980

Federal Grain Inspection Service Checklist for Extension of Official Agency
Designation and Compliance Division Checklist
In English
Undated

Department of Commerce (DoC)
Washington, District of Columbia

Principal Aspects of U.S. Laboratory Accreditation Programs
Charles W. Hyer, The Marley Organization, Inc., Ridgefield, CT
In English
January 1979

U.S. Department of Commerce Contract No. 816656

Abstract: Laboratory accreditation is widely used as a means of assuring the accuracy of test/inspection results on a wide variety of systems, products, components, and materials. Many accreditation programs are more familiarly known under terms such as laboratory approval, acceptance, recognition, listing, authorization, certification, endorsement, or registration programs. This report analyzes the programs under four different categories: (1) Federal Government; (2) State and Local Government; (3) Professional or Trade Association; and (4) Private, business entity. The report identifies 19 Federal; 19 State and Local; 18 Professional and Trade Assoc; and over 50 different private programs.

Principal Aspects of U.S. Laboratory Accreditation Systems Revised In English
July 1980

By: Office of Product Standards Policy, U.S. Department of Commerce, in conjunction with Charles W. Hyer, The Marley Organization, Inc.

U.S. Department of Commerce Contract No. NBS-NB79NAEB5387
Abstract: The first report, entitled "Principal Aspects of U.S.
Laboratory Accreditation Systems," was published on January 24, 1979.
Since then, the DoC sought information on other accreditation systems and has requested that each source update the information supplied in the summary sheets. Under a second contract Mr. Hyer, using leads from DoC as well as his personal experience and records, identified and summarized an additional 21 systems which are included in this report. Seven systems were deleted from the 1979 report.

Australia, New Zealand, and the United States Laboratory Accreditation Systems Compared

J. W. Locke and J. A. Gilmour, ASTM Standardization News In English November 1980

NVLAP Accreditation
P. S. Unger, ASTM Standardization News
In English
November 1980

Office of Product Standards NVLAP Glossary of Terms for Laboratory Accreditation, Product Certification and Standardization - NBSIR 79-1956 D. B. Thomas, OTLET, OES, NEL, National Bureau of Standards In English January 1980

Abstract: In many instances, the use of specific terms and acronyms associated with laboratory accreditation lead to misunderstandings between the program administrators, criteria committee members, laboratory personnel and product manufacturers. In an effort to eliminate these misunderstandings, this glossary of terms and definitions relating to laboratory accreditation was prepared. Since there is some overlapping of the areas of laboratory accreditation, product certification and standardization, a decision was made to establish a NVLAP glossary of terms that cover all of these areas.

National Voluntary Laboratory Accreditation Program (NVLAP)
First, Second, and Third Annual Report - February 1976-December 1977, January-December 1978, and January-December 1979
In English

Testing Laboratory Performance: Evaluation and Accreditation Gerald A. Berman, Editor, NBS Special Publication 591 In English August 1980

NVLAP for Everyone

In English

undated

Abstract: A brochure describing the procedures for anyone to request the National Voluntary Laboratory Accreditation Program (NVLAP) to establish a Laboratory Accreditation Program (LAP) under Section 7a of Title 15 of the Code of Federal Regulations.

NVLAP for Federal Agencies

In English

undated

Abstract: A brochure describing the procedures for Federal Agencies to request NVLAP to establish a LAP under Section 7b of Title 15 of the Code of Federal Regulations.

NVLAP for Private Sector Organizations

In English

undated

Abstract: A brochure describing the procedures for private voluntary organizations to request NVLAP to establish a LAP under Section 7c of Title 15 of the Code of Federal Regulations.

NVLAP Tech Brief

NVLAP Proficiency Testing Program; Carpet LAP

In English

February 1981

Abstract: A tech brief describing the proficiency testing program for carpets.

NVLAP Lab Bulletin No. 1

Requirement for NVLAP Accredited Laboratories

In English

January 10, 1980

Abstract: A lab bulletin announcing the availability of Federal Specification HH-I-515D and Amendment-1 and the requirements of accredit dlabs to be capable of testing under this amendment.

NVLAP Lab Bulletin No. 2

Procedures for Renewal of Accreditation

In English

Feburary 8, 1980

Abstract: Procedures for requesting renewal of laboratory accreditation

NVLAP Lab Bulletin No. 3

Informing the Public of Your Accreditation Status

In English

December 16, 1980

Abstract: Clarification of the regulations concerning limitations placed on NVLAP accredited laboratories with respect to informing people about their accredited status.

NVLAP Lab Bulletin No. 4

Comparison of New Criteria with Original Criteria

In English

March 12, 1980

Abstract: Clarification of differences between the original criteria for thermal insulation materials and the criteria published in the January 23, 1980. FEDERAL REGISTER.

NVLAP Lab Bulletin No. 5

The Value of Your NVLAP Accreditation

In English

April 2, 1981

Abstract: The NVLAP staff has prepared a number of papers for trade publications, made oral presentations, and responded to inquiries relative to qualified laboratories so that users of laboratory services would fully appreciate the value of using a NVLAP accredited laboratory.

NVLAP News

In English

December 1980, March 1981, and July 1981

Abstract: Newsletter of the National Voluntary Laboratory Accreditation Program (NVLAP)

Proficiency Testing: An Essential Element of Laboratory Accreditation

D. Kirkpatrick and J. Horlick, ASTM Standardization News

In English

December 1980

Abstract: A discussion of the procedures for proficiency testing under NVLAP.

NVLAP - Laboratory Accreditation Criteria

In English 1980

Abstract: The general and specific criteria to be used to accredit laboratories that test thermal insulation materials, freshly mixed field concrete, or carpet under the National Voluntary Laboratory Accreditation Program (NVLAP) of the U.S. Department of Commerce (DoC) are included. These criteria have been developed in compliance with the NVLAP Procedures (15 CFR Part 7a and 7b) and form the basis for accrediting testing laboratories that voluntarily request accreditation.

NVLAP - General Information - The Accreditation Process

In English

1980

Abstract: The accreditation process of NVLAP is comprised of four elements: (1) application, (2) proficiency testing, (3) on-site examination, and (4) evaluation and accreditation.

NVLAP-01 - Thermal Insulation Materials - Operational Information In English 1980

Abstract: Test methods and performance guidelines for laboratory accreditation for Thermal Insulation Materials.

NVLAP-01 - Thermal Insulation Materials - Supplemental Information In English 1980

Abstract: Information on how each section of the specific criteria relates to each test method.

NVLAP-02 - Freshly Mixed Field Concrete - Operational Information In English 1981

Abstract: Test methods and performance guidelines for laboratory accreditation for Freshly Mixed Field Concrete.

NVLAP-02 - Freshly Mixed Field Concrete - Supplemental Information In English

Abstract: Information on how each section of the specific criteria relates to each test method.

NVLAP-03 - Carpet - Operational Information In English 1980

Abstract: Test methods and performance guidelines for laboratory accreditation for Carpets.

NVLAP-03 - Carpet - Supplemental Information In English

Abstract: Information on how each section of the specific criteria relates to each test method.

Department of Defense (DoD) Washington, District of Columbia

Defense Logistics Agency, Defense Personnel Support Center, Philadelphia, PA Qualified Laboratory List

In English June 1980

Abstract: The Qualified Laboratory List (QLL) names testing laboratories that volunteer and are certified reliable by the Defense Personnel Support Center (DPSC). Certifications are limited to the physical, chemical, or biological tests identified in the QLL. Tests relate to the manufacture, shipping, and storage of clothing textiles, footwear, and equipage for the military services. Laboratories are surveyed and test reports are periodically verified by government tests. Contractors may use other

laboratories. Acceptance of product lots tested by other facilities is normally delayed until government tests verify report submitted. The government may accept QLL reports without waiting to complete verification tests.

Defense Electronics Supply Center of the Directorate of Engineering Standardization

Qualification Information for Manufacturers

In English July 1977

Abstract: This document has been prepared to assist the manufacturer in the qualification of his products.

Qualification Guide for Established Reliability Specifications In English

January 1979

Abstract: This handbook provides qualification personnel with general guides to uniformly evaluate manufacturers' and distributors' reliability assurance programs when these programs are required as a prerequisite for qualification, and retention of qualification approval.

Office of the Assistant Secretary of Defense, Installations and Logistics, Directorate for Technical Data

Standardization Policy and Quality Assurance Provisions Governing Qualifications-SD-6

In English
November 1969

Abstract: The Basic Provisions, Part I, together with the specific provisions, Parts II and III, as applicable, govern the authorization for and testing of products submitted for qualification. It also includes a list of laboratories suitable for testing under Military Standard MIL-STD-202.

Department of Energy (DoE) Washington, District of Columbia

Office of the Assistant Secretary, Conservation and Solar Application Laboratories Technically Qualified to Test Solar Collectors in Accordance with ASHRAE Standard 93-77: A Summary Report - NBSIR 78-1535 - W. J. Niessing, Building Economics and Regulatory Technology Division, CBT, NEL, National Bureau of Standards

In English
November 1978

Abstract: This summary report covers the identification of qualified solar collector testing laboratories. It discusses the procedures used by the Air-Conditioning and Refrigeration Institute Foundation (ARIF), the results of their evaluation, and lists the laboratories evaluated as qualified to test solar collectors in accordance with ASHRAE Standard 93-77.

Environmental Protection Agency (EPA) Washington, District of Columbia

Manual for the Interim Certification of Laboratories Involved in Analyzing Public Drinking Water Supplies; Criteria and Procedures by The Water Supply Quality Assurance Work Group

In English September 1977

Safe Drinking Water Act, Public Law 93-523

Abstract: This manual describes the Environmental Protection Agency (EPA) interim water supply laboratory certification program and the technical criteria which are considered essential to generate valid data. The technical criteria should be considered as guides for the on-site evaluation; only the methods and procedures in the Interim Primary Drinking Water Regulation or otherwise approved by EPA should be considered as mandatory for Interim Certification of a laboratory.

While the manual is intended for EPA use in approving and certifying laboratories in a uniform and impartial manner, EPA fully recognizes that there are many excellent State laboratory certification programs in operation. This manual is not intended to regulate, impede, or degrade

existing or future State certification programs.

Office of Research and Development

<u>Feasibility of an EPA Certification Program</u> - D. M. Speaker, J. C.

Fensterstock, A. M. Maher

In English
Undated

Abstract: The study explores the possible certification of environmental monitoring laboratories as a means of assuring that the quality and reliability of data generated by the laboratory would meet at least minimum levels of acceptibility. It also contains a brief description of some Federal, State, and private organization certification programs.

Department of Health and Human Services (HHS)(formerly HEW) Washington, District of Columbia

Food and Drug Administration (FDA)
Nonclinical Laboratory Studies - Good Laboratory Practice Regulations
Federal Register, Vol. 43, No. 247, pp. 59986-60025,
In English
December 22, 1978
Final Rule

Abstract: The agency is issuing final regulations regarding good laboratory practice in the conduct of nonclinical laboratory studies. Conformity with these rules is intended to assure the high quality of nonclinical laboratory testing required to evaluate the safety of regulated products.

Food and Drug Administration

Compliance Program Guidance Manual - Good Laboratory Practice - Nonclinical

Laboratories In English

October 1980

Abstract: The manual presents laboratory criteria against which nonclinical laboratories are evaluated to determine compliance with the FDA Good Laboratory Practice Regulations. The procedures for inspecting laboratories are also presented.

Management Briefings on the Good Laboratory Practice Regulations - Post Conference Report

In English August 1979

Abstract: On May 1, 2, and 3, 1979, FDA conducted half-day briefing sessions in Washington, Chicago and San Francisco on the Good Laboratory Regulations. The purpose was to provide the regulated industry with information to understand and comply with the regulations.

Health Care Financing Administration

Validation of Accreditation Surveys of Hospitals

No. 220, pp. 74826-74833

In English

In English November 1980

Abstract: This notice modifies current Medicare regulations dealing with hospitals accreditated by the Joint Commission on Accreditation of Hospitals (JCAH) and the American Osteopathic Association (AOA) to restate these regulations more simply and clearly.

Public Health Service - Center for Disease Control

Proficiency Testing Summary Analysis - Toxicology - Drugs of Abuse
In English
September 1978

Abstract: Laboratories covered by the Clinical Laboratories Improvement Act of 1967 are required to participate in the proficiency testing program conducted under the Act and its implementing regulations by the Licensure and Proficiency Testing Division, Bureau of Laboratories, Center for Disease Control. The performance of all laboratories is summarized in such a manner that each participant laboratory can relate its performance to that of peer and reference laboratories.

Health Care Financing Administration

Application package for laboratory applying for licensing under the Clinical
Laboratories Improvement Act of 1967
In English

Public Health Service, Food and Drug Administration Evaluation of Milk Laboratories

In English
1978 Edition

Abstract: Official accreditation of milk laboratories requires that the appropriate Federal or State milk laboratory control agency certify the performance of analysts in milk laboratories where the examinations required by the Grade A Pasteurized Milk Ordinance are performed. This publication provides the procedures for the evaluation of milk laboratories and sample collection surveillance programs required to meet the sanitation standards.

Department of Transportation (DoT) Washington, District of Columbia

Coast Guard
Equipment and Material Specification; Approval Procedures, Production
Inspection and Test Requirements, and Independent Laboratory Standards
Federal Register; Vol. 44, No. 243, pp. 73038-73047
In English

December 17, 1979 Rules and Regulations

Abstract: These regulations establish approval procedures, production inspection, and test procedures and standards for accepting independent laboratories for testing certain equipment and material requiring Coast Guard approval.

State and Local Agencies

State of Alabama

<u>Department of Public Health Laboratory Certification</u> - John E. Regnier, John W. Gable, Jr., Joe L. Marsh, <u>American Chemical Society Journal</u>
In English
January 1979

Abstract: Describes the laboratory certification program in Alabama under the Safe Drinking Water Act.

State of California

Energy Commission Alternatives Division
Standards and Procedures: Accreditation of Testing Laboratories for Solar
Components and Systems
In English

In English May 1978

Abstract: The document prescribes the criteria and procedures by which the State of California will accredit laboratories to test solar equipment.

State of Connecticut

Department of Health Services - Laboratory Division, Clinical Laboratory Section

General Statutes and Public Health Code Regulations pertaining to the Operation of Clinical and Public Health Laboratories
In English
August 1979

Department of Health Services
List of Laboratories Licensed in the State of Connecticut
In English
October 1979

State of Illinois

City of Chicago, IL

<u>Department of Buildings, Electrical Commission Statement of Policy - Accreditation of Testing Laboratories</u>

<u>In English</u>

September 1976

Abstract: The Chicago Electrical Code (Sec. 96-10, 87-100, Definition "Approved," and 88.9) requires that all electrical equipment and appliances be tested and listed by a nationally recognized standard testing laboratory.

State of Massachusetts

Building Code Commission
Rules and Regulations for Licensing of Concrete Testing Laboratories
In English
July 1978

Abstract: As authorized by Chapter 802 of the Acts of 1972, and in accordance with Section 127 of the State Building Code establishing the Construction Materials Safety Board, the Rules and Regulations are adopted for Licensing of Concrete Testing Laboratories.

State of New York

Department of Health

Title 10, Subpart 55-2, Approval of Laboratories Concerned with Sanitation and Environmental Analysis

In English April 1977

Abstract: Regulations on the approval of laboratories concerned with sanitation and environmental analysis.

Department of Health, Division of Laboratories and Research, Environmental Health Center

Agreement for the Approval of Laboratory Service for Examinations Concerned with Sanitation

In English Undated

Abstract: Testing laboratory agreement and application for approval.

State of North Carolina

Board of Accreditation of Concrete Testing Laboratories, Inc. (BACTL), Raleigh, NC

Laboratory Accreditation Program

In English January 1979

Abstract: The purpose of inspection and testing of materials is to determine whether or not their characteristics and qualities as used in construction comply with the contract documents.

The purpose of BACTL is to recognize those testing agencies who have the necessary equipment and qualified personnel to perform these compliance tests. Recognition is provided through an accreditation program administered by BACTL.

A request for accreditation by a laboratory and the use of the program by a specifier are both voluntary.

State of Ohio

Board of Building Standards
Testing Agencies and Laboratories Approved by the Ohio Board of Building
Standards as Accredited Authoritative Agencies
In English
December 1979

State of Pennsylvania

Department of Agriculture Approved Dairy Laboratory List In English January 1979

Abstract: List of approved Interstate Milk Shipment (IMS) laboratories and the tests for which approved.

Private, Professional Societies, Trade Associations, Standards Organizations

American Association for Laboratory Accreditation (AALA) Washington, District of Columbia

AALA and Your Laboratory In English 1978

Abstract: This document outlines the basic concepts, organization, and operating procedures of the American Association for Laboratory Accreditation (AALA), for the benefit of those who may seek accreditation of a laboratory.

American Association of Motor Vehicle Administrators (AAMVA) Washington, District of Columbia

<u>Criteria and Procedures for Approval of Testing Laboratories</u>
In English
Effective September 1, 1974

Abstract: This document prescribes criteria and procedures for the approval of laboratories which test items of motor vehicle safety equipment to determine compliance with applicable regulations and standards adopted by the Equipment Approval Program member jurisdictions.

American Council of Independent Laboratories, Inc. (ACIL) Washington, District of Columbia

Part 1 - Recommended Requirements for Independent Laboratory Qualification October 1971

Part 2 - Requirements for a Quality Control System for Testing and Inspection Laboratories

In English

Abstract: The purpose of these manuals is to prescribe the requirements for an Independent Laboratory Qualification and for the establishment and maintenance of a Quality Control System. The intent of these manuals is to provide standards by which every testing or inspection laboratory might provide uniform quality services in testing, inspection, analysis and research.

American Industrial Hygiene Association (AIHA) Akron, Ohio

Accreditation - A Plan for Accreditation of Industrial Hygiene Laboratories

In English May 1975

> Abstract: A brochure explaining the procedures for accreditation under the American Industrial Hygiene Association.

Application for Accreditation

In English March 1976

Abstract: This is a model application, fictional but patterned after a possible industrial hygiene laboratory. This application was prepared to assist the laboratory personnel making application for accreditation by AIHA. It also contains a list of accreditated laboratories by AIHA.

List of Laboratories Accreditated by the AIHA

In English August 1979

American National Standards Institute (ANSI) New York, New York

Application for Independent Laboratory Approval Under American National

Standards Institute (ANSI)

Accredited Certification Program

In English July 1972

Conducted by: Architectural Aluminum Manufacturers Association

Laboratory Qualifications Guidelines for ANSI Certification

In English

August 20, 1970

Abstract: These guidelines, which spell out the approved methods for qualifying laboratories under ANSI certification program, are written to serve as an aid to the ANSI Certification Committee and others in qualifying laboratories to do testing under various programs.

ANSI/ASTM-E-543-76-Standard Recommended Practice for Determining the Oualification of Nondestructive Testing Agencies

In English

1976

Abstract: This Recommended Practice establishes minimum requirements for agencies performing nondestructive testing.

ANSI/ASME-OCS-2-1977-Accreditation of Testing Laboratories for Safety and Pollution Prevention Equipment Used in Offshore Oil and Gas Operations In English
July 1977

Abstract: The purpose of this standard is to provide requirements for the accreditation of testing laboratories which provide testing of safety and pollution prevention equipment used in offshore oil and gas operations.

American Plywood Association (APA) Takoma, Washington

Proposal to the Occupational Health and Safety Administration (OHSA) for Temporary Laboratory Accreditation System In English Undated

American Society of Mechanical Engineers (ASME) New York, New York

Committee for Safety and Pollution Prevention Equipment (SPPE) Used in Offshore Oil and Gas Operations - Subcommittee on Certification and Accreditation

<u>Certification Procedures</u>

In English February 1978

Abstract: These procedures define the organization, scope, duties, and responsibilities and provide guidelines for the Subcommittee on Certification and Accreditation (SCCA).

ANSI/ASME-OCS-2-1977 (See description above under ANSI section.) In English

American Society for Testing and Materials (ASTM) Philadelphia, Pennsylvania

ASTM-E-548-76-Standard Recommended Practice for Generic Criteria for Use in the Evaluation of Testing and/or Inspection Agencies
In English

Abstract: This Recommended Practice provides criteria for use in the evaluation of a testing and/or inspection agency's capabilities in organization, and in its human and physical resources. These criteria also require disclosure of those factors on which the objectivity of the agency can be judged.

ANSI/ASTM-E-543-76 (See description above under ANSI section.)

ASTM-E-699-79

Standard Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E-6

In English October 1979

Abstract: This standard provides a guide for the information to be obtained and provides specific recommended criteria for evaluating the capability of an agency to conduct tests and to report on tests performed in accordance with the standards promulgated by Committee E-6 on Performance of Building Constructions.

Building Officials and Code Administrators International, Inc. (BOCA)
Homewood, Illinois

<u>Procedures for Listing of Testing Laboratories</u>

In English October 1979

Abstract: The purpose is to establish necessary procedures in order that Building Officials and Code Administrators (BOCA) International may provide a list of testing laboratories which have been investigated and found to have the necessary equipment and personnel to perform testing in accordance with the applicable standards listed in the BOCA Basic Codes.

College of American Pathologists (CAP) Skokie, Illinois

Standards for Accreditation of Medical Laboratories

In English

September 1974

Abstract: These standards have been prepared by the Commission on Laboratory Inspection and Accreditation of the College of American Pathologists for the purpose of improving the quality of pathology service. The standards have been developed to cover all aspects of pathology services.

Electronic Industries Association (EIA) Washington, District of Columbia

Engineering Department: The Quality and Reliability Engineering-IEC Committee Procedures and Criteria for Approval of Electronic Component Testing Laboratories

In English

September 1975

Abstract: This document provides the procedures and criteria for approval of laboratories which test, for qualification or certification, electronic component products.

National Association of Medical Examiners (NAME) Wilmington, Delaware

Standards for Inspection and Accreditation of a Modern Medicolegal

Investigative System

In English

October 1974

Abstract: The standards have been prepared by the National Association of Medical Examiners for the purpose of improving the quality of the medicolegal investigation of death in this country.

National Kitchen Cabinet Association (NKCA) Louisville, Kentucky

Sample Agreement for Approved Testing Laboratories
In English

In English 1977

Abstract: Sample of the conditions each approved laboratory makes with the National Kitchen Cabinet Association before approval is granted.

National Safe Transit Association (NSTA) Chicago, Illinois

Technical Verification of Laboratories

In English

Undated

Abstract: The purpose of the Technical Verification of NSTA Certified Laboratories is to confirm that all such facilities are properly equipped and competently staffed to perform and evaluate tests on packaged products in accordance with NSTA test procedures and that their test results are within the same range as other certified laboratories.

Solar Energy Research and Education Foundation (SEREF) Washington, District of Columbia

<u>Criteria for the Evaluation of Solar Testing Laboratories - Including LAB Intercorrelation and Operations Verification Procedures</u>
In English
June 1978

Abstract: This document provides the basis on which an accrediting agency will accredit laboratories for certification testing of solar equipment.

Solar Energy Research Institute (SERI) Golden, Colorado

Information and Guidelines for A Proposed Laboratory Accreditation and Product Certification Program for Photovoltaic Energy Conversion Systems NBSIR 80-2028 Douglas B. Thomas, OTLET, OES, National Bureau of Standards In English August 1980

Abstract: This report provides information and guidelines for use in preparing and implementing a laboratory evaluation and product certification program for photovoltaic products, as required in the DoE's work plan for the National Photovoltaic Energy Program.

Society for Toxicology (ST) Akron, Ohio

Functional Plan for a Board for Accreditation of Toxicological Facilities and Practices
In English
September 1978

Abstract: The purpose of the Board for Accreditation of Toxicological Facilities and Practice is to encourage, promote, and facilitate toxicological testing and research which requires the use of experimental animals through the application of acceptable practices in toxicology.

INTERNATIONAL

International Standards Organization (ISO) - Geneve Commission on Certification (CERTICO)

1. Rue de Varembe, Geneve, Switzerland

ISO Guide 24-1978 (E) - Guidelines for the Acceptance of Testing and Inspection Agencies by Certification Bodies
In English
1978

Abstract: A certification body that engages in conformity certification of products will find it essential to recognize testing and inspection agencies either in its own or other countries if it accepts the Code of Principle for Certification. It is the objective of this document to set forth the guidelines for the development of criteria with which an agency should comply if it is to be recognized as providing testing and inspection services that can be used in an acceptance program of a national certification body to meet its responsibilities.

ISO Guide 25-1978 (E) - Guidelines for Assessing the Technical Competence of Testing Laboratories

In English

Abstract: The object of this document is to set forth the general requirements with which a testing laboratory should comply if it is to be recognized as technically competent.

Additional requirements may be specified by the organization or authority granting the recognition (or approval), depending upon the specific character of the task of the laboratory. It is understood that the organization or authority should specify the procedures by which application for recognition should be made and the reasons for which the recognition might be withdrawn. The authority should also indicate how monitoring of compliance will be carried out.

<u>Certification--Principles and Practice</u> In English 1980

Abstract: This report on the principles and practice of certification has been prepared and published by the International Organization for Standardization (ISO) with the support of the International Trade Centre UNCTAD/GATT (ITC). ISO's intention in publishing this report was to provide information for those countries establishing certification systems. ITC shares an interest in the concept of certification as an aid to quality improvement and export promotion in the developing countries. It is hoped that the information provided will be of particular value to those working in this field in developing countries.

Part II

SUBJECT

Part II

SUBJECT

I. Programs, Schemes and Systems

NATA Rules
June 1974
AUSTRALIA

National Standards System - Criteria and Procedures for Accreditation of Testing Organizations
CAN-P-4 June 1978
CANADA

System for the Registration of Test Houses of Assessed Capability
Undated
GREAT BRITAIN

Bases de Operacion del sistema Nacional de Accreditamiento de Laboratorios de Pruebas ("Operation Bases of the National Testing Laboratories Accreditation System.)

MEXICO

Boletin Informatino SINALP No. 1/80 ("SINALP Bulletin No. 1/80")
MEXICO

<u>Sistema Nacional De Accreditamiento De Laboratories De Pruebas (</u>"Decree Establishing the National Calibration System")
MEXICO

American Association for Laboratory Accreditation (AALA)

AALA and Your Laboratory

1978
UNITED STATES

American Society of Mechanical Engineers (ASME) Committee for Safety and Pollution Prevention Equipment (SPPE) Used in Offshore Oil and Gas Operations - Subcommittee on Certification and Accreditation Certification Procedures

February 1978 UNITED STATES American Plywood Association (APA)
Proposal to the Occupational Health and Safety Administration (OHSA) for
Temporary Laboratory Accreditation System
undated
UNITED STATES

Commonwealth Regional Metrology Programme

1977 INDIA

II. Conference Proceedings

Organized by New Zealand Organization for Quality Assurance Quality New Zealand April 1978 NEW ZEALAND

International Conference on Recognition of National Systems for Accreditation of Testing Laboratories - First Report Task Force B
February 1979
AUSTRALIA

International Conference on Recognition of National Programs for Testing
Laboratories
October 1977
DENMARK

Report of the Committee on National Testing Facilities

December 1975
INDIA

1978 TELARC Soil Testing Symposium November 1978 NEW ZEALAND

III. Directories

Authorized Representatives of Registered Laboratories
June 1977
AUSTRALIA

Lloyd's Register of Shipping - Committee List, Staff List and Addresses of Offices
July 1980
GREAT BRITAIN

IV. Histories

NATA - A Progress Report - The First Twenty-Five Years
1977
AUSTRALIA

Into the Second Decade - The National Standards System of Canada October 1980 CANADA

Il servizio di taratura in Italia. ("About calibration service in Italy")
1979
ITALY

History of the Organization April 1981 SWEDEN

V. Documented Statutory Authority for the System

Memorandum and Articles of Association of National Association of Testing
Authorities, Australia
June 1957
AUSTRALIA

The Standards Council of Canada Act 1969-70 Chapter 41 (1st Supp) CANADA

Lov nr. 144 af 21. marts 1973 som aendret ved lov nr. 45 af 11. februar 1976 om Statens Tekniske Provenaevn ("Act no. 144 of 21st March 1973 as amended by Act. no 45 of 11th February, 1976")

DENMARK

Handelsministeriets bekendtgorelse nr. 77 af 24. februar 1976 om autorisation af laboratorier til at udfore autoriseret teknisk provning. ("Statutory order on accreditation of laboratories for the execution of accredited technical testing")

DENMARK

Handelsministeriets cirkulaere nr. 56 af 22. marts 1976 om Statens Tekniske
Provenaevn og dettes samargejde med andre offentolige myndigheder og
institutioner m.v. ("Circular of the Ministry of Trade no. 56 of 22nd March,
1976 on the Danish National Testing Board and its cooperation with other
public authorities and institutions.")
DENMARK

Export Inspection Law 1975 REPUBLIC OF KOREA

<u>Sistema Nacional De Accreditamiento De Laboratories De Pruebas ("Decree Establishing the National Calibration System")</u>
MEXICO

The Testing Laboratory Registration Act of 1972 October 1980 NEW ZEALAND

Official Testing in Sweden
April 1981
SWEDEN

Federal Grain Inspection Service (FGIS)
United States Grain Standards Act, as Amended
Final amendment dated September 1977
Department of Agriculture, UNITED STATES

Grain Standards - Federal Register, Vol. 45, No. 49, pp. 15802

March 1980

Department of Agriculture, UNITED STATES

Nonclinical Laboratory Studies - Good Laboratory Practice Regulations - Federal Register, Vol. 43, No. 247, pp. 59986-60025
December 22, 1978-Final Rule
Department of Health and Human Services, UNITED STATES

<u>Validation of Accreditation Surveys of Hospitals</u> - Federal Register, Vol. 45, No. 220, pp. 74826-74833

November 1980

Department of Health and Human Services, UNITED STATES

Equipment and Material Specification; Approval Procedures, Production

Inspection and Test Requirements, and Independent Laboratory Standards Federal Register, Vol. 44. No. 243, pp. 73038-73047

December 17, 1979-Rules and Regulations
Department of Transportation, UNITED STATES

General Statutes and Public Health Code Regulations pertaining to the Operation of Clinical and Public Health Laboratories

August 1979
State of Connecticut, UNITED STATES

Statement of Policy - Accreditation of Testing Laboratories
September 1976
City of Chicago, Illinois, UNITED STATES

Rules and Regulations for Licensing of Concrete Testing Laboratories
July 1978
State of Massachusetts, UNITED STATES

Department of Health
Approval of Laboratories Concerned with Sanitation and Environmental Analysis,
Title 10, Subpart 55-2
April 1977
State of New York, UNITED STATES

VI. Publications Listing (Catalogs) of Accreditation Organizations

British Calibration Service Publications
GREAT BRITAIN

British Calibration Service Publications List
October 1979
GREAT BRITAIN

VII. Documented Criteria for Laboratory Accreditation

Reliability, Accuracy, Consistency, Control undated

AUSTRALIA

Orientering om autorisationsordningen ("General Information on the Authorization Scheme.") DENMARK

Systems Approach to Standardization

1976 INDIA

Integrated Plan for Standardisation in Electronics

January 1977

INDIA

Report of the Panel on Guidelines for Standardisation in Electronics May 1977 INDIA

Role of Precision Measurements in Standardization and Quality Assurance of Electronic Component and Equipment

1980 INDIA

OECD Decision of the Council Concerning the Mutual Acceptance of Data in the Assessment of Chemicals (C(81) 30 (Final))

May 1981 FRANCE

OECD Principles of Good Laboratory Practice

May 1981 FRANCE

Quality Control Requirements for Test House and Laboratory Organizations January 1, 1976 DEF STANO5-32/1 GREAT BRITAIN

NATLAS Accreditation Standard-Criteria of Competence To Be Met By Testing Laboratories

May 1981

GREAT BRITAIN

NATLAS Regulations-Regulations To Be Met By Testing Laboratories
May 1981
GREAT BRITAIN

DIN-Prüf-Überwachungszeichen. Vom. 21 ("DIN Testing and Inspection Logo")
May 1975

GERMANY

Ad un buon livello i laboratori metrologici Italiani. ("At a satisfactory level the Italian metrological laboratories.)-Rivista di meccanica, 24 (662) 1978
ITLAY

Boletin Informativo SINALP No. 3/80 ("SINALP Bulletin No. 3/80")
MEXICO

ISO Guide 24-1978 (E) - Guidelines for the Acceptance of Testing and Inspection Agencies by Certification Bodies
1978

19/0 Cuitaco

SWITZERLAND

ISO Guide 25-1978 (E) - Guidelines for Assessing the Technical Competence of Testing Laboratories

1978

SWITZERLAND

Certification--Principles and Practice

1980

SWITZERLAND

Federal Grain Inspection Service Checklist for Extension of Official Agency Designation and Compliance Division Checklist

undated

Department of Agriculture, UNITED STATES

NVLAP Lab Bulletin No. 4

Comparison of New Criteria with Original Criteria

March 1980

Department of Commerce, UNITED STATES

NVLAP - Laboratory Accreditation Criteria 1980

Department of Commerce, UNITED STATES

NVLAP - General Information - The Accreditation Process

1980

Department of Commerce, UNITED STATES

Qualification Guide for Established Reliability Specifications

January 1979

Department of Defense, UNITED STATES

Office of the Assistant Secretary of Defense, Installations and Logistics, Directorate for Technical Data

Standardization Policy and Quality Assurance Provisions Governing Qualifications-SD-6

November 1969

Department of Defense, UNITED STATES

Compliance Program Guidance Manual - Good Laboratory Practice - Nonclinical Laboratories

October 1980

Department of Health and Human Services, UNITED STATES

Management Briefings on the Good Laboratory Practice Regulations - Post Conference Report

August 1979

Department of Health and Human Services, UNITED STATES

Evaluation of Milk Laboratories

1978 Edition

Department of Health and Human Services, UNITED STATES

<u>Standards and Procedures: Accreditation of Testing Laboratories for Solar Components and Systems</u>

May 1978

State of California, UNITED STATES

Board of Accreditation of Concrete Testing Laboratories, Inc. (BACTL), Raleigh, NC

Laboratory Accreditation Program

January 1979

State of North Carolina, UNITED STATES

American Association of Motor Vehicle Administrators (AAMVA) <u>Criteria and Procedures for Approval of Testing Laboratories</u> <u>Effective September 1, 1974</u>

UNITED STATES

American Council of Independent Laboratories (ACIL)

Part 1-Recommended Requirements for Independent Laboratory Qualification October 1971

Part 2-Requirements for a Quality Control System for Testing and Inspection Laboratories

1976

UNITED STATES

American Industrial Hygiene Association (AIHA)-Akron, Ohio
Accreditation-A Plan for Accreditation of Industrial Hygiene Laboratories
May 1975
UNITED STATES

American National Standards Institute (ANSI)

Laboratory Qualifications Guidelines for ANSI Certification

August 1970

UNITED STATES

American Society for Testing and Materials (ASTM)

ASTM-E-548-76-Standard Recommended Practice for Generic Criteria for Use in the Evaluation of Testing and/or Inspection Agencies

1976
UNITED STATES

College of American Pathologists (CAP)

Standards for Accreditation of Medical Laboratories

September 1974
UNITED STATES

National Association of Medical Examiners (NAME)
Standards for Inspection and Accreditation of a Modern Medicolegal
Investigative System
October 1974
UNITED STATES

Electronic Industry Association (EIA)

Procedures and Criteria for Approval of Electronic Component Testing
Laboratories
September 1975

September 1975 UNITED STATES

National Safe Transit Association (NSTA)

Technical Verification of Laboratories
undated
UNITED STATES

Solar Energy Research and Education Foundation (SEREF)
Criteria for the Evaluation of Solar Testing Laboratories-Including LAB
Intercorrelation and Operations Verification Procedures
June 1978
UNITED STATES

Solar Energy Research Institute (SERI) - Golden, CO
Information and Guidelines for a Proposed Laboratory Accreditation Product
Certification Program for Photovoltaic Energy Conversion Systems
August 1980
UNITED STATES

Society for Toxicology (ST)

Functional Plan for a Board for Accreditation of Toxicological Facilities and

Practices

September 1978 UNITED STATES

Procedures for the Approval of a Calibration Centre
October 1980
ITALY

VIII. Lists of Laboratories Approved by an Accreditation Organization

A Directory of Labortories Accredited by NATA June 1980 AUSTRALIA

Statens Tekniske Provenaevn - register over autoriserede laboratorier - arlight ("Danish National Testing Board - register of accredited laboratories.")
1980
DENMARK

Gesamtverzeichnis (General Directory")
1979
GERMANY

British Calibration Service Directory
GREAT BRITAIN

British Calibration Service - List of Approved Laboratories
May 1980-April 1981
GREAT BRITAIN

Names and Address of Those Test Houses Registered by BSI GREAT BRITAIN

Irish Department of Agriculture - List of Approved Laboratories (CEM)
1980
IRELAND

<u>Lloyd's Register of Shipping - Approved Container Thermal Stations</u> undated GREAT BRITAIN

Approved Radiographic Establishments

undated

GREAT BRITAIN

Commonwealth Science Council

Regional (Asia/Pacific) Metrology Programme-Directory of Calibration Services

August 1979

INDIA

Directory of Testing Facilities in India

1980

INDIA

New Zealand's Registered Engineering Laboratories

March 1979

NEW ZEALAND

TELARC Index 1979

NEW ZEALAND

Federal Grain Inspection Service List of Designated Official Agencies and Chief Inspectors

April 1980

Department of Agriculture, UNITED STATES

Qualified Laboratory List

June 1980

Department of Defense, UNITED STATES

Office of the Assistant Secretary, Conservation and Solar Application Laboratories Technically Qualified to Test Solar Collectors in Accordance with

AHSRAE Standard 93-77: A Summary Report

1978

Department of Energy, UNITED STATES

List of Laboratories Licensed in the State of Connecticut

October 1979

State of Connecticut, UNITED STATES

Testing Agencies and Laboratories Approved by the Ohio Board of Building Standards as Accredited Authoritative Agencies

December 1979

State of Ohio, UNITED STATES

Approved Dairy Laboratory List

January 1979

State of Pennsylvania, UNITED STATES

Certified Concrete Testing Laboratories

June 1978 CANADA

Certified Welding Inspection Organizations (Canadian Welding Bureau, 254 Merton Street, Toronto, Ontario, Canada, M4S. 1A9)
December 1979
CANADA

IX. Annual Reports

NATA Annual Report - Laboratory Accreditation is Indeed a Serious International Issue September 1980 AUSTRALIA

Annual Report 1979-1980 June 1980 CANADA

British Calibration Service - Annual Report 1978

January 1979

GREAT BRITAIN

<u>Lloyd's Register of Shipping - Annual Report 1979</u>
April 1980
GREAT BRITAIN

<u>Statens Tekniske Provenaevns arsberetning - arliq</u> ("The Danish National Testing Board - annual report.")
1980
DENMARK

The Industrial Advancement Administration - Annual Report 1980
1980
REPUBLIC OF KOREA

Reports of the Testing Laboratory Registration Council of New Zealand for the 15 months ended March 31, 1974, and for the years ended 1975, 1976, 1977, 1978, 1979, and 1980

NEW ZEALAND

National Voluntary Laboratory Accreditation Program (NVLAP) - First, Second and Third Annual Reports
February 1976-December 1977, January-December 1978 and January-December 1979
UNITED STATES

X. Descriptive Literature of the Accrediting Organization

NATA and Your Laboratory July 1979 AUSTRALIA

Australia's Laboratory Accreditation System undated AUSTRALIA

Canada and International Standardization January 1979 CANADA

The National Standards Systems of Canada July 1979 CANADA

The Standards Council of Canada November 1980 CANADA

Hvad er autoriseret teknisk provning og hvorledes opnas autorisation? ("What is accredited technical testing and how is accreditation obtained?")

DENMARK

Hvor far De deres produkter provet? ("How to get your products tested.")

About the British Calibration Service March 1978 GREAT BRITAIN

NATLAS - National Testing Laboratory Accreditation Scheme April 1981 GREAT BRITAIN

National Testing Laboratory Accreditation Scheme (NATLAS) To Be Launched
May 1981
GREAT BRITAIN

Proposed Basis of Operation of the Scheme as Endorsed By the Advisory Council on Calibration and Measurement

February 1981 GREAT BRITAIN

Why We Must Accredit Testing Laboratories January 1980 IRELAND

<u>Lloyd's Register of Shipping - "Lloyd's Register Today"</u>
January 1979
GREAT BRITAIN

The Magazine of Lloyd's Register of Shipping - 100Al July 1980

GREAT BRITAIN

La metrologia scientifica ed i laboratori metrologici primari e secondari in Italia. ("Scientific Metrology and the Primary and Secondary Metrological Laboratories in ITALY")

October 1979 ITALY

<u>Circolazione di campioni viaggiatori</u>. ("The circulation of travelling standards")

1979 ITALY

TELARC Operational Guidelines

TELARC 1974 NEW ZEALAND

TELARC Talk NEW ZEALAND

The Accreditation of Testing Laboratories in New Zealand

November 1978 NEW ZEALAND

Laboratory Accreditation in New Zealand, Part 1 General Criteria for Registration

1980 NEW ZEALAND

What is TELARC NEW ZEALAND

Functional Breakdown and Constitution of Committees CELAC/C.C./1 SOUTH AFRICA

We Check for Safety in Sweden 1979 SWEDEN

Australia, New Zealand, and the United States Laboratory Accreditation Systems Compared

November 1980

Department of Commerce, UNITED STATES

NVLAP Accreditation

November 1980

Department of Commerce, UNITED STATES

NVLAP Glossary of Terms for Laboratory Accreditation, Product Certification and Standardization

1979

Department of Commerce, UNITED STATES

Testing Laboratory Performance: Evaluation and Accreditation

August 1980

Department of Commerce, UNITED STATES

NVLAP for Everyone

undated

Department of Commerce, UNITED STATES

NVLAP for Federal Agencies

undated

Department of Commerce, UNITED STATES

NVLAP for Private Sector Organizations

undated

Department of Commerce, UNITED STATES

NVLAP Lab Bulletin No. 3

Informing the Public of Your Accreditation Status

December 1980

Department of Commerce, UNITED STATES

NVLAP Lab Bulletin No. 5

The Value of Your NVLAP Accreditation

April 1981

Department of Commerce, UNITED STATES

NVLAP News

December 1980, March 1981, and July 1981 Department of Commerce, UNITED STATES

Qualification Information for Manufacturers

July 1977

Department of Defense, UNITED STATES

Feasibility of an EPA Certification Program

undated

Environmental Protection Agency, UNITED STATES

Department of Public Health Laboratory Certification

January 1979

State of Alabama, UNITED STATES

XI. Test Methods and Test Procedures

Metallographic and Allied Tests

October 1962 AUSTRALIA

Acoustic and Vibration Measurement - Requirement for Registration

May 1976

AUSTRAL IA

Biological Testing

January 1978 AUSTRALIA

Mechanical Testing

July 1978 AUSTRALIA

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