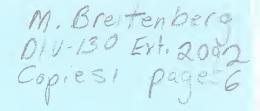
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Functions of the NBS Associate Director for Industry and Standards

Maureen Breitenberg

U.S. DEPARTMENT OF COMMERCE National Bureau of Standards Office of Standards Code and Information Office of Associate Director for Industry and Standards Gaithersburg, MD 20899

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NATIONAL BUREAU OF STANDARDS

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U.S. DEPARTMENT OF COMMERCE, Clarence J. Brown, Acting Secretary NATIONAL BUREAU OF STANDARDS, Ernest Ambler, *Director*



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INTRODUCTION

This article describes the standardization and metrological activities of the office of the Associate Director for Industry and Standards (ADIS) $\frac{1}{}$ of the National Bureau of Standards within the U.S. Department of Commerce. The primary mission of the ADIS is to formulate and implement policy related to technology transfer, standardization, product testing and certification practices, laboratory accreditation, and weights and measures. The office maintains liaison with domestic and international organizations concerned with standardization and related measurement activities and provides guidance and technical services related to weights and measures activities conducted in the United States. Many of the Office's services are available to U.S. individuals and organizations and may benefit those in other countries as well. Businessmen, government officials, and others desiring further information are invited to contact ADIS directly or through the local offices of the U.S. and Foreign Commercial Service.

There are five coordinated activities in ADIS: the Office of Standards Code and Information, the Office of Standards Management, the Office of Weights and Measures, the Office of Research and Technology Applications and the National Voluntary Laboratory Accreditation Program.

THE OFFICE OF STANDARDS CODE AND INFORMATION

The Office of Standards Code and Information (OSCI) Program fulfills three major functions specified by the U.S. Trade Agreements Act of 1979, which implements the Agreement on Technical Barriers to Trade (popularly known as the Standards Code) of the General Agreement on Tariffs and Trade (GATT). These functions are: operating the U.S. "inquiry point" for the GATT Standards Code; maintaining a national repository of standards and certification information; and providing a "technical office for non-agricultural products" to investigate problems relating to non-tariff trade barriers. OSCI works closely with Foreign Commercial Service (FCS) Officers attached to U.S. embassies and missions by briefing new and reassigned officers on available program services, sending them copies of all OSCI publications and providing standards-related technical support on request.

The U.S. inquiry point informs the GATT Secretariat in Geneva, Switzerland of proposed U.S. Federal Government regulations and receives and disseminates notifications of proposed foreign regulations (and, on request, the text of these regulations) to U.S. industry and to other U.S. Federal and state agencies. The inquiry point also maintains a hotline (a recorded message updated weekly) which provides up-to-date information on proposed foreign regulations. The hotline may be reached at any time by dialing 301-975-4041. The inquiry point also publishes the tbt news, a newsletter that describes government and other trade-related services available to industry in support of the Standards Code. OSCI's technical office staff assist U.S. manufacturers and exporters with respect to specific technically-based, standards-related trade issues; develop technical positions for U.S. negotiators in bilateral and multilateral discussions; monitor the adeguacy of U.S. participation in international

¹ ADIS was formerly the Office of Product Standards Policy (OPSP) within the Office of the Director of the National Bureau of Standards. Effective July, 1987, OPSP officially became the Office of the Associate Director for Industry and Standards (ADIS).

standardization efforts; handle complaints from representatives of U.S. industry concerning foreign standards and certification practices that might be considered technical barriers to trade; and review and transmit U.S. comments on proposed foreign regulations.

OSCI serves as the secretariat for the U.S. Interagency Committee on Standards Policy (ICSP), whose role is to coordinate Federal standards policy in the U.S. ICSP has published guidelines on: U.S. government participation in both treaty and non-treaty international standards bodies; the Federal use of third party certification programs; and the Federal use of and reliance on self-certification by producers or suppliers. These guidelines, as well as one on laboratory accreditation, are available free upon request and can serve as models for similar programs elsewhere.

OSCI also maintains the National Center for Standards and Certification Information (NCSCI), the central repository of standards-related information in NCSCI provides access to titles of standards and related the United States. documents published by U.S. professional and technical organizations, U.S. Federal and State Government groups, and foreign national and international organizations. The collection includes more than 300 reference books related to standardization, including directories, technical and scientific dictionaries, encyclopedias, and handbooks; standards-related periodicals, newsletters, articles, and reports. NCSCI maintains microform files of U. S. military and Federal specifications, U.S. voluntary industry and national standards, and international and foreign standards. NCSCI provides information on existing U.S. standards and testing or certification programs. An in-house computerized data base contains information on approximately 28,000 U.S. standards, specifications, test methods and recommended practices published by more than 400 U.S. standards-developing organizations and serves as the basis for generating a Key-Word-In-Context (KWIC) index. This index provides the title, date, source and designation number of each standard. Standards are listed in the index by all significant key words in the title. Both hard copy and microfiche copies of the KWIC index are available at cost.

NCSCI has published several directories detailing the standards activities of U.S. private and government organizations, international and regional organizations, and private and Federal certification programs. NCSCI also maintains a voluminous and growing file on state certification programs.

NCSCI serves as the U.S. ISONET information center and, as such, is linked with the information centers of other ISONET members and with the ISO Information Center in Geneva, Switzerland. As a member of ISONET, NCSCI is recognized as the principal national source for information on standards, technical regulations, certification systems, and related matters in the United States.

The OSCI makes available various other reports on standards-related topics such as the need for rationale statements (explanatory statements of why particular specifications were or were not included in a standard), the distinctions between performance and design standards, and the benefits of participating in international standardization activities. OSCI responds annually to more than 4,000 domestic and foreign requests for information on the existence, availability and sources of standards and proposed regulations. Requests for information should be as specific as possible, including all terms necessary to identify and locate the standards (as an example, one should request information on standards for x-ray machines, rather than for medical electronic equipment).

THE OFFICE OF STANDARDS MANAGEMENT

The Office of Standards Management (OSM) manages U.S. representation and participation in the International Organization of Legal Metrology (OIML). This organization, based on a treaty among 50 member nations, that has the objective of harmonizing national technical requirements, or regulations, for legal measuring instruments used for equity in commerce or for assurance of public health and safety. In carrying out these activities, international Recommendations and other documents are developed for testing and verifying measuring instruments in order to avoid possible international trade barriers and to ensure equity in the international trade of the goods and services affected by their measurements. Support of this program is obtained from instrument manufacturers, trade associations, and regulatory agencies.

OSM also administers the DoC Voluntary Product Standards Program. The Department may provide a means for the development of a voluntary product standard that is judged inappropriate for development and maintenance by private sector voluntary standards organizations, that may have significant domestic and international trade consequences, and that is in the public interest. Such standards development is undertaken after consideration of a petition of need by affected manufacturers, industries, or their trade associations which are prepared to sponsor the entire cost of the proposed activities.

THE OFFICE OF WEIGHTS AND MEASURES

A third ADIS activity, administered by the Office of Weights and Measures (OWM), coordinates national activities to promote equity in the marketplace. OWM sponsors the National Conference on Weights and Measures (NCWM), a national forum for the promotion of uniformity and effectiveness in state and local weights and measures programs. The program supports the national system of state weights and measures laboratories, providing training and laboratory audits to insure traceability to national standards. The NBS trains state metrologists so that state laboratories can qualify for certification. OWM develops performance requirements for laboratory and field weighing and measures officials. It also manages a National Type Evaluation Program that evaluates new commercial weighing and measuring devices and systems for conformance to existing regulations.

Manuals published by OWM include: NBS Handbook 44, <u>Specifications</u>, <u>Tolerances</u>, <u>and Other Technical Requirements for Weighing and Measuring Devices</u>; NBS Handbook 130, <u>Uniform Laws and Regulations</u>, which provides recommended laws and regulations for state adoption with regard to weights and measures-related areas; NBS Handbook 133, <u>Checking the Net Contents of Packaged Goods</u>; and NBS Handbook 137, <u>Examination of Distance Measuring Devices</u>. These manuals offer guidance on weighing and measuring requirements and on how to test for compliance with such requirements. The handbooks are also used as guidance for interested industries or governments that wish to implement similar requirements and programs.

The OWM program also designs, develops, delivers, and coordinates technical training for state and local weights and measures officials. OWM is assisting the NCWM in developing a series of training modules, each of which will include both a student's manual and an instructor's manual. The modules cover subjects such as how to perform an examination of a specific device to determine its conformance with NBS Handbook 44 requirements and an introduction to electronic weighing and measuring systems. Copies of the training modules are available for purchase by the public from the NCWM.

THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM

The National Voluntary Laboratory Accreditation Program (NVLAP) is a voluntary program for assessing and evaluating testing laboratories and accrediting those found competent to perform specific test methods or types of tests. NVLAP currently evaluates laboratories in the following product and service areas: thermal insulation materials, carpets, freshly mixed field concrete, solid fuel room heaters (wood stoves), acoustical testing services, personnel radiation dosimeters, commercial products (including paint, paper, and mattresses), photographic film, building seals and sealants, and telecommunications devices. New programs are under development for electrical safety, food service equipment, and construction testing services (including concrete, soils, and asphalt). The program is open to U.S. and foreign laboratories. Accreditation by NVLAP can serve to increase the acceptability of laboratory test results in the U.S. and elsewhere. Bilateral agreements with Australia, New Zealand and Great Britain make possible the mutual recognition of one another's accredited laboratories.

NVLAP accreditation contributes to the assurance that: industry receives competent testing services; regulatory agencies can secure reliable test data to assure public safety; purchasing authorities can be confident that a product conforms to specified standards; and consumers may trust the safety and effectiveness of products certified by accredited laboratories.

An annual directory of NVLAP-accredited laboratories identifies the test methods and fields of testing for which accreditation has been granted. A newsletter published quarterly reports on the latest accreditation actions and provides general information on the status of current and developing programs.

THE OFFICE OF RESEARCH AND TECHNOLOGY APPLICATIONS

The Office of Research and Technology Applications (ORTA) fulfills a legislative mandate for affected Federal units to assure wide dissemination of their research results. Each ORTA, including the NBS ORTA, is responsible for assessing the potential for non-Federal applications of technology developed through Federal R&D efforts; disseminating information on technologies of potential value to the

private sector, state and local governments for developing new or improved products, processes, and services; cooperating with other Federal organizations to coordinate the use of Federal R&D resources between agencies and with potential non-Federal users; and providing or arranging for technical assistance on request of state and local governments.

The ORTA represents the NBS in and serves on the Board of the Federal Laboratory Consortium (FLC), formally recognized by the Technology Transfer Act of 1986 (Public Law 99-502), which amends the Stevenson-Wydler Technology Innovation Act of 1980 (P.L. 96-480) that specified the creation of ORTA's. NBS acts as an agent to collect mandated funds from other agencies and to make them available to the FLC, and also provides reimbursable support and office space for the Washington Representative of the FLC.

The ORTA also acts as the NBS coordinator for collaborative research programs with industry and academia. The office conducts conferences and assists Bureau technical staff in arranging for Industry Research Associates, Guest Workers, and the formation of consortia or other cooperative activities in order to capitalize on emerging technologies to assist in the development of new products and services. Through these and other mechanisms, NBS expedites the development of its own scientific capabilities and technical services, while at the same time accelerating the transfer of new technological developments into the public domain throughout the private sector.

SUMMARY

Programs and services are available from ADIS to help to increase the quality and productivity of industry. In addition to the KWIC Index of U.S. Voluntary Engineering Standards, ADIS has available various handbooks, directories, articles and newsletters. On request, ADIS will provide a list of publications and will send copies or further information concerning relevant material. Organizations and individuals are encouraged to visit ADIS offices at the U.S. National Bureau of Standards. On a limited basis, the Office is occasionally able to pursue joint ventures related to subjects of mutual interest, contingent on the availability of knowledgeable personnel and adequate outside funding.

Requests for additional information on specific programs may be telephoned, sent by mail, or telexed to the following:

| The Office of Standards Code | National Voluntary Laboratory |
|-------------------------------------|-------------------------------------|
| and Information | Accreditation Program |
| Room A-629, Administration Building | Room A-531, Administration Building |
| National Bureau of Standards | National Bureau of Standards |
| Gaithersburg, MD 20899 | Gaithersburg, MD 20899 |
| 301-975-4029 | 301-975-4016 |
| Telex: TRT 197674 NBS UT | Telex: TRT 197674 NBS UT |

The Office of Standards Management Room A-625, Administration Building National Bureau of Standards Gaithersburg, MD 20899 301-975-4023 Telex: TRT 197674 NBS UT Office of Weights and Measures Room A-617, Administration Building National Bureau of Standards Gaithersburg, MD 20899 301-975-4004 Telex: TRT 197674 NBS UT

Office of Research and Technology Applications Room A-537, Administration Building National Bureau of Standards Gaithersburg, MD 20899 301-975-3086 Telex: TRT 187674 NBS UT

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