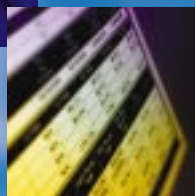


NATIONAL STANDARDS STRATEGY
FOR THE UNITED STATES

an implementation report



Introduction

The National Standards Strategy (NSS) for the United States was unanimously approved by the ANSI Board of Directors on August 31, 2000 following an intensive two-year development effort. A primary focus of the Strategy is to improve U.S. competitiveness in the global marketplace while continuing to provide strong support for domestic markets and key quality-of-life issues such as the environment.

To accomplish this, the U.S. developed a standardization framework built upon the traditional strengths of the U.S. system—such as balance, consensus, openness and transparency—while giving additional emphasis to speed, relevance and the needs of public-interest constituencies. The Strategy also reaffirms the U.S. commitment to a sector-based approach to voluntary standardization activities, both domestically and globally. The significance of this is that each sector is responsible to determine what constitutes successful standardization for its stakeholders, e.g., the level of consensus needed and the speed with which the standards are developed. In addition, the NSS defines a set of twelve strategic and tactical initiatives for use as appropriate by all diverse interests working to meet their own national and individual organizational objectives.

Implementation of the Strategy for the United States began immediately following the document's approval and continued throughout 2001. ANSI, standards developers, industry, consumers and the government have all stepped forward to assume responsibility for implementation activities. Education, outreach and increased awareness are critical for success.

Approval of this strategy was a significant accomplishment for the ANSI community and is a perfect example of the cooperation and collaboration necessary for the U.S. to be successful in the worldwide standardization arena. Global acceptance and implementation of the sector-based approach will require a significant mindset change, but the benefits will be standards that are based on sound science and technical excellence and improved safeguards for health, safety and the environment.

Tracking & Implementation

Since the approval of the NSS, ANSI focused the attention of its members on NSS implementation and advocacy of the principles contained therein. In support of these efforts, a Web-based tracking system was created to document accomplishments related to the strategy.

Available to Institute members via ANSI Online (www.ansi.org/nss), the tracking system provides a centralized data collection platform for standards developers, industry, consumers, government and ANSI itself to input their actions supporting implementation of the strategy's twelve strategic goals and associated tactics. The information collected provides an up-to-date snapshot of all of the actions in progress and/or completed relating to the implementations of the goals and tactics of the NSS.

Though this report focuses on actions ANSI has taken since the U.S. National Standards Strategy was approved through year-end 2001, future annual reports are expected to summarize the implementation efforts of all U.S. interests.

Initiative One

Build on the trend in government to use voluntary consensus standards through existing public/private partnerships.

With the passage in 1995 of the National Technology Transfer and Advancement Act (NTTAA), federal, state and local agencies have not only accelerated their utilization of voluntary standards in lieu of internally generated standards, but they are also reporting annually to Congress on both their use of standards and their participation in private-sector-led standardization activities. Thus, this initiative characterizes a critical component of ANSI's mission.

Under the leadership and guidance of its National Issues Committee (NIC), ANSI continued to strengthen its alliances with federal, state and local agencies, Congressional committees and the standards community. The Institute's goal is to educate government agencies about the importance of the voluntary consensus standardization system to U.S. competitiveness and to the health and safety of our citizens; to help them identify how they can meet their regulatory, trade, procurement and other needs through the use of voluntary consensus standards; and to raise the awareness of standards developers and users of the government's need for private-sector expertise and input.

Actions Taken

- ▶ A December 21, 2000 Report and Order published by the Federal Communications Commission (FCC) effectively eliminated government regulations addressing the development of technical standards and certification procedures for telecommunications equipment such as telephones, fax machines, or modems (referred to as customer premise equipment (CPE)) and increased reliance upon private-sector-led standardization and certification systems for the industry. More than 125 pages of federal rules were abandoned, replaced with a few pages of simple principles confirming that the telecommunications industry is to self-regulate and rely upon market forces for technical direction.
- ▶ On December 27, 2000, a new Memorandum of Understanding (MoU) was signed between ANSI and the National Institute of Standards and Technology (NIST). Superseding a 1998 document, the new agreement focuses on activities that facilitate implementation of the NSS.
- ▶ A 1912 Law prohibiting the government from paying expenses related to an individual's attendance at society or association meetings or conventions was creating an obstacle to government employee participation in standards development activities. ANSI held discussions with appropriate Congressional staff that resulted in an Amendment making the law not applicable to standards participation. This Amendment was inserted into the Defense Authorization Bill, was approved by both the House and Senate on December 13, 2001, and was signed by the President on December 28, 2001.

Initiative Two

Address the ongoing need for standards in support of health, safety and the environment.

ANSI has an ongoing relationship with four federal agencies closely identified with protection of health, safety and the environment: the Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA) and the Consumer Product Safety Commission. The Institute's implementation of the NSS initiative focuses on an expansion of outreach efforts to educate other government, industry and consumer organizations about the importance of standardization activities and to encourage them to become involved.

Actions Taken

- ▶ Steps were taken to meet with new administration officials in the FDA, OSHA and EPA and to strengthen ANSI's relationships with Congressional committees with jurisdiction in the health and safety area.
- ▶ A January 19, 2001 agreement between ANSI and the Occupational Safety and Health Administration (OSHA), an agency of the U.S. Department of Labor, brought new focus to the coordination of national and global voluntary standards that will lead to improved safety and health for workers around the world. ANSI also met with the Assistant Secretary of Labor for Occupational Safety and Health to discuss mechanisms that OSHA might employ to make better use of voluntary standards from the private sector. Following that meeting, ANSI provided testimony on November 5, 2001 to a Subcommittee of the House Education and Workforce Committee on the value of voluntary consensus standards and offered to assist the committee in amending OSHA legislation to allow faster updating of OSHA-adopted standards in order to improve health and safety in the workplace.
- ▶ A very productive meeting was held in October 2001 with the new director of the Council on Environmental Quality, Executive Office of the President. The Council coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives. One of the outcomes of the meeting was an agreement to work more closely with ANSI to deliver the message to industry of the importance of voluntary consensus standards.
- ▶ The events of September 11, 2001 resulted in enhanced interest in areas related to security and law enforcement. Many of ANSI's accredited standards development bodies responded immediately with activities to create new standards or to review existing work relevant to civil defense, acts of war, terrorism, building design and fire protection.

Initiative Three

Improve the responsiveness of the standards system to the views and needs of consumer interests.

Consumer involvement in standardization promotes safer, healthier, and more environmentally sound products and services and provides an assurance that the interests of the public are protected and represented in standardization activities. By focusing attention on activities that gather, track and analyze the needs of stakeholders in a global marketplace, ANSI is facilitating increased consumer confidence in the quality and reliability of products and services while at the same time benefiting public health, safety and the environment.

Actions Taken

- ▶ A comprehensive program to promote consumer interest participation in standardization is under development within ANSI's Consumer Interest Council. Elements of the proposal include:
 - consumer-focused training on procedural and technical aspects of the standardization process,
 - development of a database for potential consumer representatives to standards development activities,
 - establishment of definitions and criteria for participation as a “consumer representative,”
 - consideration of modifications to both domestic and international procedures with a view towards facilitating consumer interest participation, and
 - development of a financial plan in support of these initiatives.
- ▶ ANSI provided funding to support participation by representatives of nationally recognized consumer organizations in ANSI governance and policymaking bodies. In addition, the ANSI Board of Directors approved the establishment of an ANSI Consumer Participation Foundation — an ANSI internal, restricted fund — for the purpose of facilitating consumer interest participation in standards-related activities. The Board granted continuing authorization for the acceptance of contributions, including grants, to support the foundation.
- ▶ Demonstrating ANSI's commitment to consumer involvement in standards setting, ANSI's representative delivered a speech at the 2001 International Organization for Standardization (ISO) General Assembly on consumer interest representation in standardization. Noting ISO and ANSI initiatives aimed at strengthening consumer involvement, ANSI called upon national standards bodies to actively seek out and promote the use of consumer representatives; to utilize electronic resources to the maximum extent possible when in-person participation by consumers may be difficult for financial reasons; and to consider whether some type of certification program for consumer representatives would be appropriate, especially when their participation is funded by national standards bodies.

Initiative Four

Broaden the U.S. standards “umbrella” to include all those organizations that are contributing to the standards system.

While a significant portion of standardization activities are carried out within the ANSI Federation, there is a substantial amount that is not. ANSI’s goal is to provide a forum where-in all those involved in standardization can work in cooperation with one another for the benefit of stakeholders and society as a whole. This will not only help to reduce conflict and duplication among standards projects, but will help all involved to identify new ways to enhance standardization processes.

Actions Taken

- ▶ Meetings and teleconferences were held with multiple industries, including electrical, chemical, food, knowledge management and sports memorabilia, to educate them on the American National Standard (ANS) accreditation process. As a result of this outreach and educational effort, six new entities were approved as ANSI-accredited standards developers. In addition, discussions were held with various consortia to educate them on the ANS process and to open the door to ongoing dialogue on ways in which traditional standards organizations and consortia can work together for the good of society.
- ▶ ANSI’s accreditation program, under FCC and NIST auspices, for Telecommunication Certification Bodies (TCBs) grew from 14 to 16 organizations.
- ▶ ANSI met with the Assistant Secretary of Labor for Occupational Safety and Health to assure continued cooperation on the agreement achieved for joint, witnessed audits between ANSI and OSHA under their Nationally Recognized Test Lab (NRTL) program. Similar cooperative programs are also being explored with the U.S. Department of Agriculture (USDA).
- ▶ ANSI’s new Personnel Certifier Accreditation program achieved several significant milestones including developing the winning proposal for the competitive bid to accredit the Conference for Food Protection’s certification programs for some 250,000 food protection managers. An informal advisory group of experts was recruited to continue the development of service delivery processes for ANSI’s accreditation offerings in this area. Efforts on this initiative are focused on being able to fulfill the first accreditations for a group of certifiers in a pilot program during the second half of 2002, when the accreditation standard, ISO (now DIS) 17024, is targeted for publication. Dozens of ANSI members with certification programs for personnel have expressed an interest in this accreditation program. It is estimated that there are currently more than 1,700 personnel certification programs in the U.S. and that this number is increasing with the growth of the service sector of the economy.

Initiative Five

Work to improve processes internationally to more closely reflect our principles and vision.

International standards processes that are consensus based, open, balanced, transparent, flexible and timely will help ensure that the resultant international standards are globally relevant and responsive to business and societal needs. Over the past several years, the U.S. has become increasingly concerned about the impact that a regional economic bloc may have on the standardization activities of ISO and the International Electrotechnical Commission (IEC). Therefore, ANSI, as the U.S. member of ISO and IEC (through the U.S. National Committee (USNC)), is committed to provide leadership within ISO and IEC to ensure that the processes of both organizations reflect these essential principles.

Actions Taken

- ▶ A year-long effort by ANSI members and management to gather support resulted in the appointment of ANSI's current Board Chairman as ISO President-elect for 2002 and ISO President for 2003 and 2004.
- ▶ ANSI's president and CEO was named the ISO Council "leader" to develop a plan for dialogue with top-level ICT (Information Communication Technology) industry leaders and innovators to seek input on the best way forward for global ICT standardization.
- ▶ U.S. concerns over the global relevancy of ISO standards and the potential for regional dominance and influence in ISO caused ANSI to submit an appeal to the ISO Council for further consideration of this issue. The ISO Council Standing Committee on Strategies (CSC/STRAT), of which ANSI's president and CEO is a member, has been charged with examining whether regional economic cooperation can impact the outcomes of ISO standards development processes, and if so, recommending solutions and procedural changes.
- ▶ ISO has approved a revised "codified" ISO/CEN Vienna Agreement (VA) for cooperation between ISO and European (CEN) standardization that reflects all changes recommended by ANSI. The ISO Technical Management Board has also approved revised guidelines for the implementation of the VA. In these revised guidelines:
 - Euro-centric language of concern to ANSI has been removed.
 - The primacy of international standardization is more strongly reflected.
 - CEN lead will only take place in exceptional cases.
 - Revision of all documents developed under CEN lead will take place under ISO lead.
 - The ISO/TMB is to explore during 2002 the elimination of CEN lead.
- ▶ A task force of the Canadian, Mexican and U.S. National Committees of IEC drafted an "Electrotechnical Cooperation — Americas (ECA)" proposal detailing strategic policy and technical coordination activities. The task force presented this proposal at the May 2002 meeting of the Pan American Standards Commission (COPANT).

Initiative Six

Work to harmonize the use of standards worldwide as a tool for meeting regulatory requirements.

As business becomes increasingly more global in scope, the need for regulations that can be met by one standard and one conformity assessment method grows. ANSI believes that standards and related conformity assessment tools can provide both improved regulatory compliance and reduced costs of compliance for the regulated community. To a great extent, the task is to increase understanding by government regulators at all levels so that they can achieve their objectives more efficiently through the increased use of voluntary consensus standards.

Actions Taken

- ▶ Under the auspices of the National Issues Committee, the Institute engaged in a focused outreach program to federal government agencies for the purpose of educating them about the voluntary consensus standards and conformity assessment programs.
- ▶ Recognizing that the states, as well as the federal government, could benefit from the increased use of voluntary consensus standards, ANSI is now actively involved in engaging state policymakers in voluntary consensus standardization and conformity assessment activities. The first official outreach efforts were begun in November when officials of ANSI and NIST met with California legislative staff. This meeting afforded ANSI the opportunity to gain useful insights into the need for standards at the state level as well as to acquire a better understanding of how to approach legislative staff on standardization matters.

Initiative Seven

Provide an outreach program to show those outside the U.S. the value of U.S. technology, standards and processes.

The decentralized standardization system in the United States is not always understood and its benefits — flexibility and relevance to users — are not always recognized by global interests. Pursuit of this NSS goal will help to ensure that parties in both the national and international arenas understand the strengths offered by the U.S. approach.

Actions Taken

- ▶ Under the NIST Grant, and in support of U.S. outreach to the developing countries within the Pan American Standards Commission (COPANT) region, ANSI hosted a representative from the Brazilian standards organization (ABNT) for a period of four months (July 16, 2001—November 16, 2001) in order to educate and train him on strategic and management aspects of the U.S. standards and conformity assessment systems and related programs. The ABNT representative provided ANSI staff and member groups, such as the ANSI International Forum, with presentations on standardization activities in Brazil and the South American region. This outreach proved to be an excellent opportunity for information exchange and the discussion of opinions on national and international policy matters of importance to both organizations. It also afforded both ANSI and ABNT an opportunity to learn a great deal about each other’s cultures, visions and processes.
- ▶ Through COPANT and the Pacific Area Standards Congress (PASC), ANSI invited developing countries to submit proposals on needed services. ANSI will seek to match these proposals with appropriate sectors, interests (industry, government and Standards Developing Organizations) and funding.
- ▶ Under the direction of ANSI’s Regional Standing Committee-Americas (RSC-A), the NSS was translated into Spanish and distributed during the May 2001 COPANT General Assembly meeting. In addition, the RSC-A is exploring the translation of training courses into Spanish as well as the production of a COPANT English language strategy document.
- ▶ An ANSI delegation met with officials of the standards and conformity assessment communities in China and the Republic of Korea to engage in a mutual exchange of information on the respective standardization systems. ANSI was also requested to share its mission and visions with several foreign delegations, including ones from China, Japan, the Republic of Korea and Israel.
- ▶ ANSI also hosted a representative of the Japanese Standards Association (JSA) Conformity Standards Division of the Standards Engineering Department for three months (September 10, 2001 - November 21, 2001). As part of JSA’s plan to review its role and policies regarding standardization activities, the representative conducted interviews with ANSI staff and officers that focused on: the NSS and its implementation; U.S. participation in international standardization activities; ANSI’s relationship with the government and standards developing organizations; and U.S. positions on market driven standards development, education and training and international policy initiatives. She also met with numerous ANSI-accredited standards developing organizations and with various government agencies in order to acquire a comprehensive understanding of the U.S. standards and conformity assessment system.

Initiative Eight

Improve the standards process within the U.S. to address customer needs for efficiency.

This goal highlights the core concerns of quality and responsiveness relative to the standards development process and acknowledges the importance of addressing the needs of stakeholders and customers throughout. Achieving this goal will improve the relevancy of the process and, ultimately, reliance by the public, industry and regulators on it.

Actions Taken

- ▶ In conjunction with events to celebrate World Standards Day 2001, ANSI hosted the conference *XML and the Standardization Community: An Open Forum*, which featured representatives from private and public sector organizations currently using extensible Markup Language (XML) to automate and facilitate the standards development and dissemination process. The goal of the forum was to present the distinct advantages that XML, a new technology that facilitates data transfer over the internet, offers to standards development such as to increase efficiency and reduce costs, achieve greater coordination and collaboration among standards organizations, and boost public participation in standards activities and public access to standards. Case studies were presented and followed by a panel discussion. The discussion centered on developing a means to share the progress of XML-related standards work in an effort to facilitate cooperation and collaboration among Standards Developing Organizations (SDOs) for XML specifications. ANSI agreed to accept this challenge and committed its resources toward developing a web portal to centralize the exchange of ideas and on-going efforts regarding the use of XML to improve the standardization life cycle. In addition, it was also agreed that one of the key goals to incorporating XML would be to work towards developing a small set of harmonized bibliographic fields (metadata) that could ultimately facilitate the XML-based exchange of standards related information.
- ▶ Under the direction of the Executive Standards Council (ExSC), ANSI implemented an electronic distribution, review and approval system within the ExSCs Audit Subcommittee to expedite the closing of audit reports. ANSI also revised its procedures to provide for a shortened public review period for standards that are available electronically and approved for incorporation into the ANSI procedures a process to expedite the national adoption of ISO or IEC standards.

Initiative Nine

Improve the standards process within the U.S. to address customer needs for coherence.

Minimizing conflict and duplication in standards development activities is an essential component of a successful standardization program. The need for this was given particular attention during the development of the U.S. National Standards Strategy.

Actions Taken

- Under the direction of the Executive Standards Council (ExSC), the ANSI procedures have been revised to incorporate, via the Project Initiation Notification System (PINS) process, an early coordination mechanism relative to the development of American National Standards (ANS). Upon identification of a potential conflict or duplication with an existing ANS, a deliberation of stakeholders is required as a condition of continuing to process the proposed standard as an ANS. These procedures are available for use and were officially incorporated into the latest edition of the *ANSI Procedures for Development and Coordination of American National Standards* (January 2002).

Initiative Ten

Improve communications between various public and private elements of the U.S. standards system.

As the private sector becomes more involved in developing standards which form the basis of governmental regulations, the necessity for increased involvement of all affected parties and communication among the parties becomes paramount. ANSI believes that it is necessary to ensure the involvement of labor, state and local government, consumers and other under-represented parties in the development of voluntary consensus standards as well as in the policy development activities.

Actions Taken

- ▶ A Communications and Public Relations plan was developed to promote awareness of voluntary consensus standards and conformity assessment activities. This plan will expose, via various methods of public relations, marketing and communications, how standards and conformity assessment programs relate to customer satisfaction, product function, U.S. competitiveness and the ability of both companies and government to forge strategic business alliances.
- ▶ A bi-weekly, e-mail based newsletter, “*What’s New*,” was launched in early 2001 and is distributed free-of-charge to ANSI members and constituents. Each issue includes synopses of stories posted on the ANSI Online news pages and links to current news, events and publications information available from the website.
- ▶ A new procedural maintenance mechanism was implemented on ANSI Online to provide timely access to approved procedural revisions.

Initiative Eleven

Make the value of standards development both apparent and real by educating public and private sector decision makers about the value of standards and how to take advantage of the process.

In order to convince key decision makers to fully embrace voluntary consensus standards as a solution to the challenges they face, it is important that they understand the value of the standards development process and the practical ways that they can benefit from involvement in the process. To this end, it will be necessary to proactively reach out to decision makers at all levels, in government, industry and especially academia, to make them aware of the unique standards framework that underpins the U.S. economy.

ANSI believes that the results of the U.S. standards system are self-evident, but there is a need to increase understanding of the value — both to ensure continued support for the standards infrastructure and to assure the involvement of the needed expertise and leadership from both the private sector and government in the years to come. To address this challenge, a strategy for education is being implemented that will expand current educational programs beyond traditional constituencies, and attempt to introduce standards to decision makers and future decision makers at an earlier stage, preferably through curricula adopted by the educational system.

Actions Taken

- ▶ In March 2001, the Board of Directors formed an Ad Hoc Committee on Standards Awareness and Education to be responsible for all of the Institute's educational initiatives.
- ▶ ANSI participated in the American Council of Independent Laboratories (ACIL) February 2001 conference to educate testing labs with regard to the American National Standard (ANS) process and their options for participating in it.
- ▶ ANSI's National Issues Committee (NIC) is focusing on increasing education/awareness activities, including outreach to Congressional and Administration officials. Meetings held in November 2001 with House Judiciary Committee staff and with the Chairman of the House Financial Affairs Committee highlighted use of standards in new areas such as biometrics. In addition, ANSI presented testimony to a subcommittee of the House Education and Workforce Committee in November 2001 relating to OSHA's need for voluntary consensus standards and an improved adoption/revision process for such standards. These meetings and presentations revealed a strong Congressional interest in the activities ANSI coordinates and an interest in working closely with ANSI in the future.
- ▶ ANSI and NIST met with California legislative staff and leadership in November 2001 to explain the standards system and encourage their involvement in ANSI and Standards Development Organizations. Those officials who attended the meetings showed strong interest, but also revealed that there are a great many more state officials who need to be educated about the basics of voluntary standards and the ANSI process. Follow-up meetings are planned in 2002 with regional and national groups of state officials.

Initiative Twelve

Establish a stable funding mechanism for the standardization infrastructure.

A major challenge to the voluntary consensus standardization system in the United States is that of funding the infrastructure. While the standards resulting from this system benefit society as a whole, support for the system is provided primarily by those who are active participants — a small number by comparison. If the system is to continue to respond to the needs of society, a long-term, well-thought-out funding methodology must be developed.

Actions Taken

- ▶ In August 2001, the ANSI Board of Directors engaged in an initial dialogue on this subject and agreed that further study of the various complexities of this issue was essential. They requested the National Issues Committee to put together a specific program and proposal for consideration at a future Board meeting.



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