

UNITED STATES STANDARDS STRATEGY (USSS)

NOTICE OF PUBLIC REVIEW AND COMMENT

Issued: March 7, 2005
Deadline for Comments: April 18, 2005
Public Forum: April 15, 2005 – Washington, DC

Background

In mid-2004, the American National Standards Institute (ANSI) convened a committee to review and revise the National Standards Strategy for the United States (NSS). The purpose of a standards strategy for the United States is to establish a framework that can be used by all interested parties to further advance trade issues in the global marketplace, enhance consumer health and safety, meet stakeholder needs and, as appropriate, advance U.S. viewpoints in the regional and international arena.

The attached revision, re-titled the United States Standards Strategy (USSS), was developed in an open, balanced, transparent and participatory process. More than 100 representatives of industry; small, medium and large enterprise; standards developers and consortium; consumer groups; and federal and state government have participated in the development and review process. These participants are committed to developing the U.S. Standards Strategy in a fair and open manner.

Public Review and Comment

The USSS Committee is inviting public review and comment on the attached draft. All comments must be received before 5:00 p.m. (EST) on Monday, **April 18, 2005**.

Submit comments to: Mr. Joseph Tretler, Jr.
ANSI Staff Liaison for the U.S. Standards Strategy Committee
American National Standards Institute
25 West 43rd Street – Fourth Floor
New York, NY 10036

T: 212.642.4977
E: jtretler@ansi.org

Public Forum

A public forum on the USSS, hosted by the National Institute of Standards and Technology (NIST) and ANSI, will take place on Friday, April 15, 2005, at the Department of Commerce in Washington, DC. The public forum is meant to raise awareness of the Strategy; to engage stakeholders in a dialogue of its principles, strategic initiatives and tactics; and to invite public comment. The results of the forum discussion will be included in a compilation of public comments and considered in a final draft of the U.S. Standards Strategy.

There is no charge for the public forum but pre-registration is required. To register electronically, please send an e-mail message containing the attendee's name, title, organization, telephone, telefax and e-mail address to registration@ansi.org, or call 212-642-4956.

UNITED STATES STANDARDS STRATEGY

Public Review Draft

Comment Review Period: March 7, 2005 – April 18, 2005

I. Introduction

Voluntary consensus standards are at the foundation of the U.S. economy. The U.S. based standards system promotes the public good, enhances the competitiveness of U.S. industry, and contributes to a liberalized global trading system.

The United States is a market-driven, highly diversified society, and its standards system encompasses and reflects this framework. We see this framework as a positive attribute, and envision a standards system strengthened whenever standards developers share a common vision for meeting stakeholder needs. We also recognize that it is important for public and private sectors to share this common vision, since they provide the people, the resources, and the intellectual vitality that underpin the U.S. standards system. In particular the involvement of government at all levels and all places, i.e. federal, state, and local, is key to both the development of the vision and implementation of a Standards Strategy for the U.S.¹

We realize that standards are inherently essential to a sound national economy and to the facilitation of global commerce. We also realize that the global standardization landscape is rich with entities, systems and processes, and that both the U.S. Government and private sector participate in international standards activities in a variety of ways: through treaty organizations where governments are members; through professional and technical organizations whose membership is on an individual or organizational basis; and through consortia, whose membership is typically company and industry based.

The American National Standard Institute (ANSI), in its unique role as the leading U.S. organization for coordinating and promoting voluntary consensus standards in the U.S. and the U.S. representative in non-treaty international and regional standards-setting activities has brought together a cross-section of public and private sector² interests to reexamine the principles and strategy that guide how the United States develops standards and participates in the international standards-setting process. The publication of this United States Standards Strategy has emerged from these deliberations to meet the need for a statement of purpose and ideals and to provide a vision for the future of the U.S. standards system in a more globally competitive economy.

¹ Unless a more specific reference is included, “government” should be read as government at all levels.

² The word “sector” is used in two different meanings in this document. The first use divides the world into the “public sector” and the “private sector”, distinguishing between the roles of government and non-government. The second use refers to a technology area or industry segment where customer needs dictate a coherent and consistent approach to standardization. This use is sometimes called “industry sector” or “market sector” but the simpler term “sector” is used in this document to include all interested parties (e.g., government, academia, consumer interests, standards development organizations, professional societies trade associations, etc.) and not just commercial interests. The context of the use of the term should connote which meaning is applicable.

IMPERATIVES FOR ACTION

The Global Economy

The global economy has raised the stakes in standards development. Competition for the advantages that accompany a widespread adoption of technology has reached a new level, and the impetus to develop globally accepted standards is greater now than ever before.

Globally

- Global standards goals are achieved in the United States through sector-specific activities and through alliances and processes provided by companies, associations, standards developing organizations, consortia, and collaborative projects.
- This market-driven, private-sector-led approach to global standards is substantially different from the top-down approach favored elsewhere.
- Emerging economies understand that standards are synonymous with development and request standards-related technical assistance programs from donor countries. Such programs are being used increasingly by our trading partners to influence the selection of standards by these economies and create favorable trade alliances.
- Policies that protect patents, trademarks, and other intellectual property are not universally or rigorously applied. The standards process must respect the rights of intellectual property owners while ensuring users have access to the intellectual property rights (IPR) incorporated in standards.
- When standards are utilized as non-tariff barriers to trade, the ability of U.S.-based companies and technologies to compete in the international marketplace is adversely affected.
- Standardization and the manner agreements are reached between suppliers and customers continue to evolve and are influenced by advances in technology. Stakeholders are no longer willing in all cases to operate within the boundaries of the formal standards system and they continue to explore new modalities of standards development. Organizations such as consortia and internet based processes that enable worldwide participation of stakeholders are creating an innovative environment that is becoming increasingly important in the global marketplace.

At home

- Investment by public and private sectors in the development of global standards is directly related to the health of the economy. Economic downturns produce reductions in the resources available for global standards development.
- Users of standards are more aware of their importance and are demanding a U.S. system that can produce and deliver standards with maximum efficiency and minimum cost, eliminate duplication, and optimize the benefits of a decentralized system.
- Government agencies at the federal, state, and local levels are willing to invest in voluntary consensus standards that have been developed in accordance with globally accepted principles.
- The national interest in some emerging areas of standardization such as homeland security demand a level of coordination and effort that is new to the traditional standards culture.

PRINCIPLES

It is well established in the community of nations that standards should meet societal and market needs and should not be developed to act as barriers to trade. In approving the World Trade Organization Technical Barriers to Trade Agreement, WTO members recognized that goal and established globally accepted principles as a framework to promote cooperation and discourage the use of standards as trade barriers. The U.S. standards system **is based on** the following set of globally accepted principles for standards development.

- **Transparency**
Essential information regarding standardization activities is accessible to all interested parties.
- **Openness**
Participation is open to all affected interests.
- **Impartiality**
No one interest dominates the process or is favored over another.
- **Effectiveness and relevance**
Standards are relevant and effectively respond to regulatory and market needs, as well as scientific and technological developments
- **Consensus**
Decisions are reached through consensus among those affected.
- **Performance-based**
Standards are performance-based, specifying essential characteristics rather than detailed designs where possible.
- **Coherence**
The process encourages coherence to avoid overlapping and conflicting standards.
- **Due Process**
Standards development accords with due process so that all views are considered and appeals are possible.
- **Technical Assistance**
Assistance is offered to developing countries in the formulation and application of standards.

In addition, U.S. interests strongly agree that the process should be

- **Flexible**, allowing the use of different methodologies to meet the needs of different technology and product sectors;
- **Timely**, so that purely administrative matters do not slow down the work, but meet market expectations; and
- **Balanced** among competing interests.

OUR STRATEGIC VISION

Working from these principles, the U.S. standards community is strongly committed to the following strategic vision for standards development globally and at home.

Globally

- There is universal application of the globally accepted principles for the development of global standards.
- Governments rely on voluntary consensus standards as much as possible in regulation and procurement, or in lieu of creating additional regulatory requirements.
- The system is diverse and inclusive and supports flexible standardization solutions. Consortia and forums are illustrative of that flexibility and are an integral part of the U.S. standardization system.
- The U.S. is committed to standardization that meets global needs. Standards activities are conducted by industry sectors in venues selected for their ability to meet those needs.
- Electronic tools are used effectively for the optimized production of global standards and to facilitate their dissemination throughout a global economy.

At home

- A cooperative process involving all stakeholders produces technically superior and unified standards that promote and strengthen U.S. global competitiveness.
- All U.S. interests work together to eliminate redundancy and overlap.
- Public and private sector management recognize the value of standardization at national and global levels and provide adequate resources and stable funding mechanisms to support such efforts.
- The U.S. standards system responds quickly and responsibly to provide standards that address national and international needs, threats, and goals.

MOVING FORWARD

The strength of standardization in the United States is a sectoral focus supported by a dynamic infrastructure.

The sectoral focus comes from the participants – companies, government agencies, public interest organizations, talented individuals – who understand what is needed in their sector, and the standards developers through which they work to meet those customer needs. The sectoral approach allows interested parties to address their own issues and develop working methods that fit the problems at hand, since no single standardization system can satisfy all needs. This allows efficient standards development and fosters innovation and competition. When cross-sectoral issues arise, sector definitions change, or in venues where a single national voice is required, the infrastructure provided by the American National Standards Institute (ANSI) provides facilitation and mediation.

A sectoral approach recognizes that there is no simple prescription that can be handed down to fit all needs. Sectors must develop their own plans; the purpose of this strategy is to provide guidance, coherence and inspiration without constraining creativity or effectiveness. The United States Standards Strategy therefore consists of a set of strategic initiatives having broad applicability which will be applied according to their relevance and importance to particular sectors. Stakeholders are encouraged to develop their own tactical initiatives where needed and this strategy suggests some which have widespread applicability.

Beginning in 2005, ANSI should publish and present an annual report at the World Standards Day Conference on the implementation of the United States Strategy.

1 – Strengthen participation by government in development and use of voluntary consensus standards through public/private partnerships

Government reliance on voluntary consensus standards continues to grow. Public Law 104-113, the National Technology Transfer and Advancement Act (NTTAA), remains the cornerstone at the federal level for promoting the use of voluntary consensus standards for both regulation and procurement. Our vision of the future involves building on our successes in this area and encouraging government and industry to use voluntary standards developers as partnership venues to create solutions to support national objectives. The key to such partnerships is participation, which requires support and resources from government policy makers at all levels. Tactical initiatives include:

- *ANSI, standards developers, government, and industry* should partner to identify proposed solutions where government interests could be addressed by the use of voluntary consensus standards and work together for a common solution.
- *Government* should increase participation in the development of voluntary consensus standards.
- *ANSI and standards developers* should provide state and local governments with ways to easily identify where their interests are being addressed and mechanisms for participating in voluntary consensus standards development.
- *The U.S. Government* should use existing relationships with state and local government and their responsibilities under NTTAA to support greater use of voluntary consensus standards.
- *ANSI and standards developers* should raise awareness of policy makers on the benefits of voluntary consensus standards and the importance of participating in their development.

2 – Continue to address health, safety, and the environment in the development of voluntary consensus standards

Consideration of health, safety, and the environment has always been a key concern of the U.S. standards system and will continue to be so in the future. It is important to take a balanced approach to ensure that the needs of all stakeholders are considered and that decisions are based on empirical evidence that has been widely embraced by the scientific community. Active participation by government and industry on voluntary consensus standards committees is essential to forge the trust and synergy needed to develop standards that meet society's needs today and tomorrow. Tactical initiatives include:

- *Standards developers* should establish specific guidance to encourage participants to consider health, safety and the environment as integral aspects of their work.
- *Government* should participate in voluntary consensus standards development efforts to ensure that they meet public objectives related to health, safety, and the environment.
- *Industry* should participate in standardization activities and consider health, safety, and the environment while ensuring that the resulting standards add value.
- *ANSI* should foster consideration of health, safety, and environmental requirements in U.S. and international standards where appropriate.

3 – Improve the responsiveness of the standards system to the views and needs of consumers

The representation of consumer³ interests in the U.S. standards system is essential to ensure that the individual's needs are being considered. Today's consumers are more concerned about health, safety, and the environment, more informed about products and services, and more socially conscious. With its emphasis on balance, openness, and transparency, the U.S. standards system provides a valuable forum for the consumer voice to be heard. However more is needed to make consumers aware of these opportunities and to encourage and facilitate their participation. Tactical initiatives include:

- *Standards developers* should identify and encourage appropriate consumer representation on their committees and encourage consumer comment during public reviews.
- *Industry* should use consumer research as a basis for standardization initiatives and decisions.
- *Government* should strengthen its consumer-related programs and initiate standards information and participation programs as appropriate.
- *ANSI* should work with consumer organizations to educate them about standardization and encourage participation in standards development.

³ Consumers are defined as those individuals who use goods or services to satisfy their individual needs, rather than companies, government agencies, or other organizations that use goods or services.

4 – Actively promote the consistent worldwide application of internationally recognized principles in the development of standards.⁴

A key goal of international standards processes is to define requirements that products and services should meet to be acceptable in international markets. To ensure broad acceptance, members of the standards community have made considerable progress in establishing internationally accepted principles on how such standards should be developed. Our strategy seeks to encourage the consistent interpretation and application of these principles. Tactical initiatives include:

- *The U.S. standards community* will work to improve global relevance by promoting participation in standards processes by a broad cross-section of both domestic and international stakeholders, particularly in markets where the relevant products are used.
- *Stakeholders in the U.S. standards system* will seek to reinforce the sectoral approach to standards development in regional and international forums and highlight the benefits of this approach.
- *The U.S. government* should continue to foster and support the unique character and strengths of the public-private partnership in standards development as it pursues trade and other international agreements, regulatory harmonization, and legislative and regulatory approaches.
- *The U.S. Government and industry* should coordinate their work in international forums to promote the consistent interpretation and application of internationally recognized principles on standards, including those reflected in the WTO Technical Barriers to Trade Agreement and the Decision on Principles for the Development of International Standards.

U.S. stakeholders participate in standards development bodies around the world to achieve their objectives. The goal of all international standards forums should be to achieve globally relevant and internationally recognized and accepted standards that support trade and commerce while protecting health, safety, security and the environment. To advance this goal, *U.S. stakeholders* should pursue the following tactical initiatives:

- Promote the consistent application of principles for developing standards in international standards development organizations as elaborated in the TBT Agreement, including the principles on global relevance.
- Encourage standards development forums to work together to address the need for standards on converging technologies that affect the interests of involved stakeholders.
- Work with all stakeholders to ensure that voting procedures in international standards development bodies do not limit consideration of U.S. views while respecting all other views.

⁴ Internationally recognized principles”, including those highlighted in Section III Principles, are contained in the WTO Agreement on Technical Barriers to Trade agreement and the WTO TBT Committee’s Decision on Principles for the Development of International Standards. The text can be viewed online at http://www.wto.org/english/docs_e/legal_e/17-tbt.doc

5 –Encourage common governmental approaches to the use of voluntary consensus standards as tools for meeting regulatory needs

Many standards are developed to meet regulatory needs. Governmental approaches to regulation, however, often differ, resulting in incompatible national and regional standards that add unnecessary expense and may limit trade. Global commerce would be facilitated if governments would apply common approaches to the use of standards as tools to meet regulatory needs. Standards developed through a voluntary consensus process have proven effective at meeting both regulatory and market needs in a variety of sectors. The following tactical initiatives would help advance this strategic goal:

- *Governments* should be encouraged to adopt compatible approaches to using standards to meet regulatory needs, and partner with all stakeholders to develop standards that have global acceptance.
- *Standards developers* and *industry* should work with governments to develop voluntary consensus standards that meet regulatory needs.
- *ANSI* and *government* should work together to improve the understanding among domestic and international stakeholders on the benefits of using voluntary consensus standards in regulation.

6 – Work to prevent standards and their application from becoming technical trade barriers to U.S. products and services.

As tariff barriers have been reduced, technical standards have become more prominent as potential barriers to market access for products and services. Differing technical standards can significantly raise the cost of exporting to and importing from international markets or even prevent market access. The facilitation of global trade requires that more attention be given to preventing standards and their application from becoming market access barriers and addressing barriers which arise. Tactical initiatives include:

- *The U.S. Government* should work with its counterparts in other countries and through intergovernmental organizations to encourage the recognition of all relevant standards in support of regulations, and to minimize potential trade barrier requirements for different or duplicative tests.
- *The U.S. Government* should work with other WTO members to seek full implementation of the Technical Barriers to Trade (TBT) Agreement and annexes as well as decisions taken in the WTO TBT committee.
- *Government and industry* should identify and eliminate or minimize the effect of technical barriers to trade that result from technical standards and their application.

7 – Strengthen international outreach programs to promote understanding of how voluntary, consensus-based, market-driven sectoral standards processes can benefit businesses, consumers and society as a whole.

Our standards process offers enormous benefits to businesses, consumers and society, facilitating innovation and strengthening economic competitiveness. But this process is not well understood by many outside the United States. We need to do more to help foreign stakeholders understand the benefits of the approach embodied in the U.S. standards system. Tactical initiatives include

- All stakeholders in the U.S. standards development process—particularly industry, standards developers and the U.S. Government--need to devote more resources and greater efforts to helping stakeholders in other countries understand the U.S. process and its many benefits.
- U.S. stakeholders should promote policies and procedures in international forums that encourage the development of standards that are voluntary, consensus-based, market-driven and globally relevant.
- Outreach efforts should be focused on countries that offer important commercial market opportunities and are still developing their standards processes.
- Special attention should be given to using new communications technology, such as the Internet, teleconferencing and real-time modes of communication, to facilitate contacts with non-U.S. stakeholders, particularly in newly developing markets, and their participation in standards-related activities.
- ANSI should play a leadership role in promoting dialogue with foreign standards organizations and reinforcing outreach efforts of industry, standards developers, the U.S. Government and other stakeholders.

8 – Continue to improve the process and tools for the efficient and timely development and distribution of voluntary consensus standards

In recent years, the U.S. standards system has made significant strides in the timeliness, relevancy, and compatibility of standards by taking advantage of technologies to promote online collaborative standards development and electronic distribution of standards. In the spirit of process improvement and in response to changing customer needs and evolving new technologies, all stakeholders in the U.S. standards systems must continue to work together to build on these successes. Tactical initiatives include:

- *Standards developers* should continue to improve the working processes for voluntary consensus standards development and use compatible tools to facilitate global participation.
- *Industry and government* should provide standards developers with feedback on their needs and how well standards developers are meeting those needs.

9 – Promote cooperation and coherence within the U.S. standards system.

The diversity of the sectorally-based, decentralized U.S. standards system can result in duplicative efforts and sometimes overlapping or conflicting standards. In many cases, apparent overlap or conflict is merely the reflection of different customer needs for different sectors. Duplication, where it does not add value, should be discouraged. Tactical initiatives include:

- *ANSI* should review its procedures to make sure that standards receiving the ANS designation are relevant and minimize conflict with other standards.
- *ANSI and standards developers* should work together to eliminate areas of redundancy to make the process more efficient and coherent.
- *ANSI* should continue to reach out to standards developing organizations not under the ANSI framework to promote its programs, principles and tools to broader constituencies and explore ways to work those broader constituencies to best serve U.S. needs.
- *Industry and government* should be proactively engaged with standards developers to minimize duplication of standards development activities.
- *Government* should provide timely information on proposed regulatory actions in order to minimize conflict with existing or proposed standards.

10 – Establish standards education as a high priority within the United States private, public and academic sectors.

Education programs covering the development and implementation of standards need to become a high priority within the United States. These programs must focus on the needs of leaders and top executives, those who participate in the development of standards, university and college students, and other interested parties. Tactical initiatives for all stakeholders, including *standards developers, ANSI, government, and academia* include:

- Develop new or significantly enhance existing standards education programs that address the significance and value of standards to the well-being of the United States and global economies.
- Develop or significantly enhance standards education programs that address the needs of specific groups within the United States. These programs must reflect the multidisciplinary environment in which standards development takes place and address national and international standards development procedures; the relationship between private and public sector standards; health, safety, the environment, sustainability, international trade, public policy, competition, legal, economic benefits, and strategic considerations; and how to balance the interests of stakeholders.
- Develop a national database of standards case histories. The database should be jointly managed by the American National Standards Institute and the U.S. Department of Commerce.
- Encourage universities and colleges within the United States to create standards education programs in fields of study such as engineering, science, technology, government and public policy, economics and law.
- Facilitate and enhance the creation of a communications network for standards education programs among all interested parties in the private, public and academic sectors. Utilize internet technology to the fullest extent possible to facilitate the development of e-learning and standards education programs.

11 – Maintain stable funding models for the U.S. standardization system

There is no single method of funding the U.S. standardization system, and the U.S. recognizes the need to protect the pluralistic manner in which the standardization system is funded. We believe that if this standardization system meets public and private sector needs, then those who want the results will ensure that the necessary funding is provided.

The tactical initiatives that support this strategy focus on the need to educate and influence policy and decision-makers, and stress the need for the component organizations that comprise the U.S. system to be able to maintain their various funding models.

Tactical initiatives include:

- *Standards developers* should seek the participation and support of industry and government for voluntary consensus standards development and educate public sector policymakers, corporate leadership and consumers in the value of the diverse U.S. standardization system, including support of the *National Technology Transfer and Advancement Act*. *Government* should advance and respect policies at home and abroad that ensure the continued ownership and control of the copyrights and trademark of standards developers. *Industry* should support standards development through participation of their experts, funding of research, and sharing of information useful in defining and setting standards requirements. They should also utilize, and support the use of, standards to produce goods, provide services, install products, and conduct all other aspects of business activity in their respective sectors. *All elements of the U.S. standardization system* should support policies that allow U.S. standards developers to participate in international standards development activity without jeopardizing their copyrights and trademarks, and that recognize the flexible funding models that exist within the US.
- *Governments* at all levels, in their consideration of policies and legislation, should recognize the societal benefits of standards development organizations and their role in public health and safety.
- *Government* should recognize its responsibility to the broader public interest by providing financial and legislative support, and promoting our standardization system globally. Competitiveness of US industry globally critically depends on standardization, particularly in sectors that are technology driven.

12 – Address the need for standards in support of emerging national priorities

The U.S. standards system has contributed significantly to meeting a diverse range of private and public sector needs in a variety of sectors. ANSI has risen to the challenge posed in areas as diverse as homeland security and nanotechnology, through the creation of standards panels that bring together all affected interest areas, both public and private sector, to achieve maximum impact for standards efforts. With the ever-growing threats to our national security, and the rapid development of new technologies that hold the promise of economic growth and improved quality of life, the U.S. standards system must be prepared to mobilize quickly to respond to emerging national priorities as they are identified. Tactical initiatives include:

- *Government* at all levels should seek early collaboration with industry and standards developers to identify standards needed to meet emerging national priorities.
- *ANSI* should provide active coordination, where necessary, in areas relating to emerging national priorities to promote information sharing across all affected interest areas and minimize overlap and duplication of standards-related efforts.
- *Standards developers* should proactively identify standards work in existence or underway that could support emerging national priorities.
- *Industry* should participate actively in efforts to identify needed standards and in the timely development of those standards;
- *Government, industry and standards developers* should be proactive in addressing international implications of standards in support of national priorities.

IN THE LONGER RUN

This document represents an architecture for achieving goals. The proof of this strategy, however, will lie in the achievement of those goals. The visions herein will become reality only when they are translated into action. What lies in the balance is the competitiveness of U.S. industry, the vitality of the U.S. economy, and a balanced global trading system.

The next steps will engage all concerned in the implementation of this strategy. Tactical issues must be addressed. This will require communication, cooperation, planning, and a commitment to action. In the longer run, progress must be measured, and this strategy, like all plans made within the constraints of time, must be revisited and reevaluated. The American National Standards Institute will continue to serve as a mechanism for coordinating, integrating, and reporting progress in regular intervals.

Open and accessible, the U.S. standards system has contributed its technology, in gigantic proportions, to other standards models and to other societies. It is committed, not only to interests within its own territory, but to international standardization, and to a global trading system that is balanced and without obstacles. This strategy is designed to strengthen the standards system of the United States and all who benefit from it.