

**NISTIR 7701**

**Sixth Annual Report on Federal  
Agency Use of Voluntary Consensus  
Standards and Conformity Assessment**

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*Technology Services Laboratory*

**NIST**

**National Institute of Standards and Technology**  
Technology Administration, U.S. Department of Commerce

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**U.S. DEPARTMENT OF COMMERCE**

*Donald L. Evans, Secretary*

**TECHNOLOGY ADMINISTRATION**

*Phillip J. Bond, Under Secretary of Commerce for Technology*

**NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY**

*Arden L. Bement, Jr., Director*

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# **Sixth Annual Report on Federal Agency Use of Voluntary Consensus Standards and Conformity Assessment**

## **I. EXECUTIVE SUMMARY**

### **1.1 The Interagency Committee on Standards Policy**

The Interagency Committee on Standards Policy (ICSP) currently has 45 members, including agency Standards Executives, their alternates, and the National Institute of Standards and Technology (NIST) chair and secretariat. Several members of the NIST technical staff serve the secretariat in non-member committee support positions. Six agencies have vacant Standards Executive positions.

Two additional agencies could be invited to the ICSP table: the new Department of Homeland Security, a cabinet-level department; and the Access Board, formerly the Architectural and Transportation Barrier Compliance Board, an independent federal Board created by Congress in 1973. Both agencies will probably need to use government-unique and national consensus standards in their various programs, hence coordination with the membership of the ICSP will be essential.

The committee meets at the call of the chair. The committee met four times in FY2002 at various locations in the Washington Metropolitan Area. It is anticipated that the committee will continue to meet, at a minimum, on a quarterly basis.

### **1.2 Federal Agency Use of Standards**

The reports of federal agencies indicate that their use of voluntary consensus standards continued to increase, although at a reduced rate, in FY 2002. The efforts of the agencies to use voluntary consensus standards and to comply with the National Technology Transfer and Advancement Act (NTTAA) remain strong.

The reduced rate of increase in the use of voluntary consensus standards reflects the effect of the continuing use of voluntary consensus standards to replace the declining number of government-unique standards in the federal inventory. The declining inventory of government-unique standards has been created by past agency efforts to comply with the NTTAA. Obviously, as agencies replace government-unique standards with voluntary consensus standards, the inventory of government-unique standards used by federal agencies will decrease. It is expected that the rate of replacement of government-unique standards will continue to decline over future years until the number of those standards in the federal inventory reaches the level necessary for federal use.

According to the figures reported by all of the agencies, the overall federal government use of government-unique standards in lieu of voluntary consensus standards increased while the number of voluntary consensus standards (VCSs) substituted for government-unique standards (GUSs) decreased slightly during the past year. At the same time, the number of voluntary consensus standards used by the federal government during FY 2002 decreased in comparison to FY 2001. This apparent decline in the number of voluntary consensus standards used by the agencies continues to reflect the fact that agencies use different methods to count how they use standards, often changing that method year to year based upon agency interpretation of the reporting requirements. The ICSP will continue to work to improve the consistency in reporting standards usage. The ongoing development of a cumulative inventory of all standards used by the federal government may help to alleviate this continuing issue.

### **Overall Use of Standards Reported by Federal Agencies**

Year	GUSs in lieu of VCSs	VCSs substituted for GUSs	VCSs Used
2002	65	91	2,959
2001	54	106	3,749
Difference	+11	-15	-790

Source: Agency reports

### **1.3 Participation of Federal Agency Employees in the Voluntary Standards Development Process**

Agencies further reported that the number of employees participating in the activities of voluntary consensus bodies increased in FY 2002, but the number of activities in which employees actually participated has decreased. The decrease in voluntary consensus standards body participation may be attributable to decreases in agency fiscal resources. In times of fiscal restraint, expenditures for employee travel and per diem normally decrease. Further, employee participation in activities that are not related directly to the ongoing standards activities also declines in order to conserve available agency resources. Vacancies on some standards development committees are often not filled when employees retire or transfer to other positions.

As in the past, many agencies report the number of voluntary consensus “activities” in which their employees participate, rather than the number of voluntary consensus “bodies.” For future reporting, NIST seeks to clarify the meaning of “activities” versus “bodies.” Voluntary consensus “activities” include all committee, task group, work group, subcommittee, periodic meetings, or conferences that a voluntary consensus “body” conducts. A voluntary consensus “body,” for the purposes of this report, includes standards development organizations such as the American Society of Mechanical Engineers, the National Fire Protection Association, the Institute of Electrical and Electronics Engineers, or ASTM International. Next year’s reporting guidelines will specify whether agencies are to report “activities” or “bodies.”

### **Employee Participation in Voluntary Consensus Standards Activities**

Year	Employees Participating in VCS Activities	VCS Activities in Which Employees Participate
2002	3,229	1,157
2001	2,838	847
Difference	+391	+310

Source: Agency reports

#### **1.4 Federal Agency Conformity Assessment Activity**

The agencies reported continued participation in conformity assessment activities. Four agencies reported new activities for FY 2002 in which they increased their participation in activities related to improving compliance with established voluntary consensus standards. Participation on various committees allowed representatives of the agencies to work with other federal agencies and non-governmental organizations in the development of conformity assessment policies and guidelines.

## **II. NATIONAL TECHNOLOGY TRANSFER AND ADVANCEMENT ACT OF 1995 AND THE OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-119**

### **2.1 The National Technology Transfer and Advancement Act of 1995**

President William J. Clinton signed Public Law 104-113, also known as the National Technology Transfer and Advancement Act of 1995 (NTTAA), on March 7, 1996. One purpose of the NTTAA is to ensure that government agencies achieve greater reliance on voluntary consensus standards developed by the private sector and decreased dependence on government-unique standards developed by and for the government. Previously, when a government agency identified the need for a standard, it would often create and adopt a government-unique standard rather than use an existing, applicable voluntary consensus standard to address the need. The result was often unnecessary allocation of government resources to the development of government-unique standards when similar, private sector standards, developed through a consensus process, already existed. The development and implementation of similar standards in the private sector and among different government agencies creates confusion as to which standard is applicable. It also creates additional burdens for those who, while complying with a private sector consensus standard, also have to comply with a differing government standard. The NTTAA now requires that federal agencies use private sector, voluntary consensus standards whenever possible in lieu of creating government-unique standards.

The NTTAA designates NIST as the primary federal agency responsible for providing encouragement and support to government agencies in their efforts to comply with the NTTAA. The NTTAA requires NIST to “coordinate federal, state, and local technical standards activities and conformity assessment activities, with private sector technical standards activities and conformity assessment activities, with the goal of eliminating unnecessary duplication and



complexity in the development and promulgation of conformity assessment requirements and measures.” NIST is also directed to help federal agencies compare private-sector standards used in commerce with government-unique standards developed by the federal government. Through this activity, government agencies can identify and possibly eliminate government-unique standards that duplicate private sector standards.

### **2.1.1 NIST Responsibilities Under the NTTAA**

In summary, the NTTAA directs NIST to:

- ▶ Coordinate with other federal agencies, as well as state and local governments, to achieve greater reliance on voluntary standards and lessened dependence on in-house standards.
- ▶ Assist federal agencies in comparing standards used in manufacturing, commerce, industry, and educational institutions with the standards developed by the federal government.
- ▶ Coordinate greater use by federal agencies and state and local governments of private sector standards.
- ▶ Emphasize where possible the use of standards developed by private consensus organizations.

### **2.1.2 Federal Agency Responsibilities Under the NTTAA**

In general, except as provided below, all federal agencies and departments should use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.

In carrying out their responsibilities under the NTTAA, federal agencies, and departments, “. . . shall consult with voluntary, private sector, consensus standards bodies and shall, when such participation is in the public interest and is compatible with agency and departmental missions, authorities, priorities, and budget resources, participate with such bodies in the development of technical standards.”

If the use of technical standards developed or adopted by voluntary consensus standards bodies is inconsistent with applicable law or otherwise impractical, a federal agency or department may elect to use technical standards that are not developed or adopted by voluntary consensus standards bodies, but the head of each such agency or department is to transmit to the Office of Management and Budget an explanation of the reasons for using such standards. Beginning with FY 1997, the NTTAA requires that the Office of Management and Budget transmit an annual report to Congress and its committees summarizing all explanations for the use of technical standards received in the preceding year.

## **2.2 The Office of Management and Budget Circular A-119 (“the Circular”)**

### **2.2.1 The Circular**

In 1982, the Office of Management and Budget issued Circular A-119 to establish policies for various federal agencies for improving the internal management of the Executive Branch in regulatory and procurement activities. The Circular has been revised several times, most recently in 1998, and is now consistent with Section 12(d) of the NTTAA. It directs federal agencies to use voluntary consensus standards in lieu of government-unique standards except where such use would be inconsistent with law or otherwise impractical. The Circular also provides guidance for agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the NTTAA. The Circular’s policies are intended to minimize the reliance of federal agencies on government-unique standards. The Circular’s policies do not create the basis for discrimination in agency procurement or regulatory activities among standards developed in the private sector, whether or not they are developed by voluntary consensus standards bodies.

In addition, the Circular, consistent with Section 12(b) of the NTTAA, directs the Secretary of Commerce to issue guidance to the agencies in order to coordinate conformity assessment activities. NIST published this guidance in the *Federal Register* on August 10, 2000 (65 FR 48894-48902).

The Circular notes that standards developed by voluntary consensus standards bodies are often appropriate for use in achieving federal policy objectives and in conducting federal activities, including procurement and regulation.

The policies of OMB Circular A-119 are intended to:

- ▶ Encourage federal agencies to benefit from the expertise of the private sector;
- ▶ Promote federal agency participation in such bodies to ensure creation of standards that are useable by federal agencies; and
- ▶ Reduce reliance on government-unique standards where an existing voluntary standard would suffice.

The 1998 revision (February 19, 1998 [63 FR 8545]) states that the policy of the federal government for agency procurement and regulatory activities is to:

- ▶ Rely on voluntary standards, both domestic and international, whenever feasible and consistent with law and regulation;

- ▶ Participate in voluntary standards bodies when such participation is in the public interest and is compatible with agencies' missions, authorities, priorities, and budget resources; and

- ▶ Coordinate agency participation in voluntary standards bodies so that, “. . . the most effective use is made of agency resources . . .” and that the views expressed by such representatives are in the public interest and “. . . do not conflict with the interests and established views of the agencies.”

### **2.2.2 Federal Agency Responsibilities Under the Circular**

The detailed requirements for federal agencies under the NTTAA are set forth in the Circular. Under the Circular, the Secretary of Commerce must:

- ▶ Coordinate and foster executive branch implementation of the Circular and, as appropriate, provide administrative guidance to assist agencies in implementing the Circular including guidance on identifying voluntary consensus standards bodies and voluntary consensus standards;

- ▶ Sponsor and support the ICSP, which is chaired by the National Institute of Standards and Technology to consider the various federal agency views and advise the Secretary of Commerce and agency heads on the Circular;

- ▶ Report to the Director of OMB concerning the implementation of the policy provisions of this Circular;

- ▶ Establish procedures for agencies to use when developing directories described in Section 15(b)(5) of the Circular and establish procedures to make these directories available to the public; and

- ▶ Issue guidance to the agencies to improve coordination on conformity assessment in accordance with Section 8.

Under the Circular, the heads of the various federal agencies must:

- ▶ Implement the policies of the Circular in accordance with procedures described in the Circular;

- ▶ Ensure agency compliance with the policies of the Circular;

- ▶ For an agency with significant interest in the use of standards, designate a senior-level official as the Standards Executive who will be responsible for the agency's implementation of the Circular and who will represent the agency on the ICSP; and

- ▶ Transmit the annual report prepared by the agency Standards Executive as described in Sections 9 and 15b(6).

Under the Circular, agency Standards Executives must promote effective use of agency resources and participation in the voluntary consensus standards process. They are responsible for developing:

- ▶ Agency positions that are in the public interest and that do not conflict with each other;
- ▶ Agency positions which are consistent with administration policy; and
- ▶ Agency technical and policy positions that are clearly defined and known in advance to all federal participants on a given committee.

Standards Executives must also coordinate their agency's participation in voluntary consensus standards bodies by:

- ▶ Establishing procedures to ensure that agency representatives who participate in voluntary consensus standards bodies will, to the extent possible, ascertain the views of the agency on matters of paramount interest and will, at a minimum, express views that are not inconsistent or in conflict with established agency views;
- ▶ To the extent possible, ensuring that the agency's participation in voluntary consensus standards bodies is consistent with agency missions, authorities, priorities, and budget resources;
- ▶ Ensuring, when two or more agencies participate in a given voluntary consensus standards activity, that they coordinate their views on matters of paramount importance so as to present, whenever feasible, a single, unified position and, where not feasible, a mutual recognition of differences;
- ▶ Cooperating with the Secretary of Commerce in carrying out their responsibilities under this Circular;
- ▶ Consulting with the Secretary of Commerce, as necessary, in the development and issuance of internal agency procedures and guidance implementing the Circular, including the development and implementation of an agency-wide directory identifying agency employees participating in voluntary consensus standards bodies and the identification of voluntary consensus standards bodies;
- ▶ Preparing, as described in Section 9, a report on uses of government-unique standards in lieu of voluntary consensus standards and a report on the status of agency standards policy activities;

- ▶ Establishing a process for ongoing review of the agency's use of standards for purposes of updating such use; and
- ▶ Coordinating with appropriate agency offices (e.g., budget and legal offices) to ensure that effective processes exist for the review of proposed agency support for, and participation in, voluntary consensus standards bodies, so that agency support and participation will comply with applicable laws and regulations.

### **III. THE INTERAGENCY COMMITTEE ON STANDARDS POLICY (ICSP)**

#### **3.1 Fiscal Year 2002 Activities**

As reported in detail below, the ICSP had an active year with two continuing working group assignments. Three working groups that reported in FY 2001 have been discontinued due to inactivity. The Laboratory Accreditation and Conformity Assessment Working Group, the Working Group on Quality Management (ISO 9000), and the Standards Working Group of the CIO and of ICSP will be reactivated at the call of the chair.

##### **3.1.1 Ad Hoc Working Groups**

Ad Hoc Working Groups are initiated at the call of the committee chair to address specific issues or challenges that arise during full committee meetings. Membership is voluntary, but is solicited from agencies that have been determined to be significant, potential contributors to the working group's mission. The historical status of the working groups is listed below.

1997

1. Working Group on Regulatory Agencies
2. Working Group on Quality Management Systems (ISO 9000)
3. Working Group on ISO 14000
4. Working Group on Laboratory Accreditation
5. Working Group on Directory Database
6. Working Group on Standards Management

1998

1. Regulatory Agencies' Working Group
2. Working Group on Quality Management (ISO 9000)
3. Working Group on ISO 14000
4. Working Group on Laboratory Accreditation
5. Working Group on Directory Database
6. Working Group on Standards Management

1999

1. Regulatory Agencies Working Group
2. Working Group on Strategic Standards Management
3. Working Group on Directory Databases
4. Working Group on Quality Management (ISO 9000)
5. Interagency Working Group on Environmental Management Systems (EMS) (ISO 14000)
6. Procurement Agencies Working Group
7. Working Group on Federal Agency Participation
8. Laboratory Accreditation Work Group
9. Standards Working Group of the CIO and of ICSP

2000

1. Regulatory Agencies Working Group
2. Working Group on Strategic Standards Management – Dissolved
3. Working Group on Directory Databases
4. Working Group on Quality Management (ISO 9000)
5. Interagency Working Group on Environmental Management Systems (EMS) (ISO 14000) – Merged with the Executive Order 13148 group outside the ICSP
6. Laboratory Accreditation Work Group – Merged into the Federal Coordination Group of the National Cooperation for Laboratory Accreditation (NACLA)
7. Standards Working Group of the CIO and of ICSP

2001

1. Laboratory Accreditation and Conformity Assessment Working Group
2. Regulatory Agencies Working Group

2002

1. Regulatory Agencies Working Group
2. Working Group on Directory Databases

### **3.1.1.1 Regulatory Agencies Working Group Report**

The chair of the Regulatory Agencies Working Group (RAWG) reports the following.

The Interagency Committee on Standards Policy, Regulatory Agencies Working Group (ICSP-RAWG) helps develop and implement standards policies of interest to regulatory entities of the federal government. Membership includes representatives from CPSC, DOE, EPA, FCC, FDA, NASA, NIST, NRC, and OSHA. The Working Group reports to the ICSP and serves as a forum for interagency information exchange and discussion of issues of mutual interest.

During FY 2002, the Working Group focused on issues and activities related to the updating of voluntary standards referenced in mandatory regulations. It developed suggestions on how to expedite the updating process with a focus on the most significant standards for reference updates.

### **3.1.1.2 Working Group on Directory Databases Report**

The chair of the Working Group on Directory Databases (WGDD) reports that the group was not active during FY 2002 but is planning activity during FY 2003.

## **3.2 Committee Policy Recommendations on Continuing Implementation of the NTTAA and Circular A-119**

### **3.2.1 Meaning of the term “use.”**

Both the meaning of the term “use of standards” and how “use” should be counted and reported have been the subjects of many discussions during ICSP meetings. Some inconsistencies remain in the ways agencies interpret and report their use of standards, leading to difficulties in completing an accurate, comparative analysis of the use of voluntary consensus standards by the federal agencies.

The ICSP established a working group to address the use of standards and how to report use. During FY 2002, the ICSP made a significant effort to define “use” and guide its membership on how to report “use” of standards. That effort is ongoing and may be expanded to include an outreach-training program to coordinate further the agency efforts. In FY 2003, NIST will survey agency needs regarding awareness and understanding of responsibilities under the NTTAA and the Circular.

Agencies were asked in FY 2002 to identify the way in which they report their use of standards. Agency reports indicated that standards are used in many ways by federal agencies. Most obvious is incorporation by reference in regulatory and procurement documents. However, standards may also be “used” by the federal government in compliance guidelines issued by regulatory agencies, or by regulatory agencies during enforcement actions. Standards for goods and services are used in various ways during federal agency procurement activities. Individual standards may be part of individual procurement contracts or they may be part of a comprehensive list of standards acceptable for the provision of goods and services to the federal government.

Five questions were asked in the FY 2002 annual survey of the agencies to learn how agencies report their use of standards. The following is a summary of responses received to the five questions on use:

- a. Does your federal agency report only the first-time use of standards, continued uses of standards, or both first time and continued uses of standards?

Thirteen agencies report both first-time use and continued use of standards.  
Seven agencies report only the first time a standard is used.  
Two agencies report only continued use of standards.  
Two agencies report no use of standards.  
Seven agencies did not respond to the question.

- b. Please read the following brief explanation before responding to this question.  
When reporting standards use, some agencies report uses of standards. That is, they count the total number of instances where the agency has referenced a standard. For example, three separate references to a single standard are counted as three standards uses. On the other hand, other agencies report standards used. These agencies report the number of standards that the agency references. In this case, each standard is counted only once regardless of how many times it is referenced by the agency.

Nineteen agencies count the total number of instances they reference a standard.  
Two agencies report no use of standards.  
One agency counts the total number of instances it references a standard only once.  
Nine agencies did not respond to the question.

- c. Does your federal agency report multiple editions of a single standard as one standard or as multiple standards used?

Eleven agencies report multiple editions as multiple standards.  
Ten agencies report multiple editions as one standard.  
One agency reports both types of use.  
Two agencies report no use of standards.  
Seven agencies did not respond to the question.

- d. Does your federal agency report standards that it uses for guidance purposes (as opposed to compliance purposes)?

Seven agencies report they count use of standards for compliance purposes only.  
Seven agencies responded "Yes."  
Three agencies report they count standards used for guidance and compliance purposes.  
Three agencies report they count standards used for guidance purposes only.  
Two agencies report no use of standards.  
Nine agencies did not respond to the question.

- e. Does your federal agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Fifteen agencies report that they use standards from non-ANSI-accredited standards developers.  
Five agencies report they only count ANSI-accredited standards.  
Two agencies report no use of standards.



Nine agencies did not respond to the question.

In order to address differences in the interpretation of the meaning of the “use of standards” and to establish specific guidance for the reporting of use, the Chair of the ICSP will work with the committee to develop a guidance document for reporting the use of standards by federal agencies.

### **3.3 Membership**

#### **3.3.1 Agency Standards Executives and Representatives**

National Institute of Standards and Technology

Committee Chair

Dr. Belinda Collins

Committee Co-chair

Ms. Mary Saunders

Committee Secretariat

Mr. Kevin McIntyre

Agency for International Development

Standards Executive

Ms. Kathleen O’Hara

Consumer Product Safety Commission

Standards Executive

Mr. Colin Church

Standards Executive Representative

Ms. Jacquie Elder

Executive Office of the President

Standards Executive

Ms. Suzanne Troje

OMB/ICSP Liaison

Ms. Jacqueline Zeiher

Federal Communications Commission

Standards Executive

Mr. Michael Crowe

Federal Emergency Management Agency  
Standards Executive  
VACANT

Federal Trade Commission  
Standards Executive  
Mr. Alain Sheer

General Services Administration  
Standards Executive  
VACANT

Standards Executive Representative  
Mr. Charles Gallagher

International Trade Commission  
Standards Executive  
Mr. Stephen McLaughlin

National Aeronautics and Space Administration  
Standards Executive  
VACANT

Standards Executive Representative  
Mr. Richard Weinstein

National Archives and Records Administration  
Standards Executive  
Ms. Nancy Allard

National Communications Systems  
Standards Executive  
Mr. Nick Andre

National Science Foundation  
Standards Executive  
Mr. Alex Schwarzkopf

Nuclear Regulatory Commission  
Standards Executive  
Mr. Michael Mayfield

Standards Executive Representative  
Mr. Frank Cherny

U.S. Department of Agriculture  
Standards Executive  
Dr. Greg Parham

Standards Executive Representative  
Ms. Sandra Ginyard

U.S. Department of Defense  
Standards Executive  
Mr. Gregory Saunders

Standards Executive Representative  
Ms. Trudie Williams

U.S. Department of Education  
Standards Executive  
Mr. Arthur Graham

Standards Executive Representative  
Mr. Barry Stone

U.S. Department of Energy  
Standards Executive  
Mr. Richard Black

Standards Executive Representative  
Mr. Richard Serbu

U.S. Department of Health and Human Services  
Standards Executive  
Ms. Janet Showalter

Standards Executive Representative  
Ms. Christina Underdonk

U.S. Department of Housing and Urban Development  
Standards Executive  
VACANT

Standards Executive Representative  
Mr. David Engel

U.S. Department of the Interior  
Standards Executive  
Mr. Daryl White

Standards Executive Representative  
Ms. Sherry Barnett

U.S. Department of Justice  
Standards Executive  
Mr. Michael Carr

U.S. Department of Labor  
Standards Executive  
Mr. Steven Witt

Standards Executive Representative  
Ms. Barbara Bielaski

U.S. Department of State  
Standards Executive  
Ms. Marian Gordon

U.S. Department of Transportation  
Standards Executive  
Ms. Linda Lawson

Standards Executive Representative  
Mr. Robert Stein

U.S. Department of the Treasury  
Standards Executive  
Mr. Michael Parker

Standards Executive Representative  
Ms. Helen Whatley

U.S. Department of Veterans Affairs  
Standards Executive  
Mr. Gary Krump

Standards Executive Representative  
Mr. Pierre Lundy

U.S. Environmental Protection Agency

Standards Executive

Dr. Mary McKiel

Standards Executive Representative

Mr. Craig Annear

U.S. Government Printing Office

Standards Executive

VACANT

Standards Executive Representative

Ms. Sylvia Subt

U.S. Postal Service

Standards Executive

VACANT

Standards Executive Representative

Mr. Bill Griggs

### **3.3.2 Changes in Membership and Vacancies**

The committee currently has 45 members including Standards Executives, their alternates, and the NIST chair and secretariat. Several members of NIST's technical staff serve the secretariat in non-member committee support positions. There are currently six Standards Executive vacancies. Two other agencies may need to address membership on the ICSP: the new Department of Homeland Security, a cabinet-level department and the Access Board, formerly the Architectural and Transportation Barrier Compliance Board, an independent federal Board created by Congress in 1973.

There was some turnover in committee membership during the past year. Some members of the committee left since the last report due to retirement, career reassignments, and other reasons. Member agencies appointed 13 new members to the committee either to replace departing members or to fill existing vacancies. Future turnover in the next few years will affect the corporate memory of the committee. NIST will work with the ICSP to develop and sponsor outreach and training programs using current and new resources to educate and inform new members as they are appointed to the committee. NIST will continue to work with OMB and the respective agencies to fill all existing Standards Executive vacancies.

The formation of the new Department of Homeland Security (DHS) necessitates a review of its structure to determine the need for appointment of its Standards Executive. The incorporation of various agencies into DHS also necessitates a review of current membership assignments in light of the various agencies' transfers of all or parts of their current missions. It will also become

necessary in the next year to determine if DHS is to submit an annual report on its use of standards.

The Architectural and Transportation Barriers Compliance Board (ATBCB), referred to today as the Access Board, is concerned with accessibility for people with disabilities. It has about 30 staff and a governing board of representatives from federal departments, plus public members appointed by the President. Key responsibilities of the board include developing and maintaining accessibility requirements for the built environment, transit vehicles, telecommunications equipment, and for electronic and information technology; providing technical assistance and training on these guidelines and standards; and enforcing accessibility standards for federally funded facilities. The possible addition of the Access Board to the membership of the ICSP will be discussed during the next year.

#### **IV. FEDERAL AGENCY USE OF STANDARDS**

##### **4.1 General Discussion**

NIST and the ICSP have reviewed and discussed the nature of the annual report on federal agency use of standards and have determined at this time that the inclusion of tables illustrating the various types of standards usage can be misleading. This determination recognizes that the various agencies have different interpretations of the manner in which to report their use of standards. These various interpretations make it difficult to perform a valid comparison of the data reported by individual agencies. We are working on a more accurate and satisfactory way to summarize, report, and present relevant data for future reports. For this year we are calling the readers' attention to these few key areas:

- The efforts of the agencies to comply with the NTTAA and OMB Circular through the use of voluntary consensus standards in lieu of government-unique standards remain strong.
- The use of new voluntary consensus standards to replace existing government-unique standards continues to increase although at a slower rate due to a declining inventory of government-unique standards available for replacement.
- The current inventory of voluntary consensus standards and government-unique standards used by the federal government in federal regulations stands at 7,464 citations.
- The total number of standards incorporated by reference into the Code of Federal Regulations by federal regulatory agencies is approximately 9,500. This total includes voluntary consensus standards, government-unique standards, and standards developed by private organizations, consortia, and other standards development organizations.

The tables and text of this section reflect data that are part of a dynamic, ongoing inventory of all technical documents incorporated by reference into the FY 2001 Code of Federal Regulations (CFR) by federal regulatory agencies. The Standards Services Division of NIST developed the inventory during FY 2002 to establish a baseline of the use of standards by regulatory agencies from which future use or non-use of standards by the federal government can be measured. The inventory contains technical documents incorporated by reference into the FY 2001 CFR, including voluntary consensus standards; government-unique standards; private, non-consensus

standards; and technical publications. All of the identified documents are incorporated into the regulatory text of the FY 2001 CFR, with some recent updates, by the various federal regulatory agencies.

NIST extrapolated the data in the regulatory inventory from the Finding Aids section contained in each volume of the FY 2001 Code of Federal Regulations. The specific information comes from the section in the Finding Aids entitled, "Incorporations by Reference." The inventory does not now include voluntary consensus standards that are incorporated by reference in the lists of standards various agencies use for the development of procurement documents. NIST proposes to develop that inventory later.

The data provided in this section reflects the cumulative use of voluntary consensus standards and government-unique standards in federal regulations by federal agencies. Data on standards used by procurement agencies in FY 2002 and any other data or comments reported by individual agencies may be extrapolated from the individual agency reports in Sections VII and VIII of this report.

#### **4.2 Cumulative Use of Voluntary Consensus Standards by Agency**

Table 4.2 lists the total number of voluntary consensus standards that are currently incorporated by reference in the CFR by the respective agencies. The data were taken from NIST's initial inventory of standards incorporated by reference in the CFR developed in the past year. NIST is in the process of refining and verifying the data extrapolated from information in the Finding Aids sections of the FY 2001 edition of the CFR. The totals for some agencies are still under review, but are believed to be 85 percent to 95 percent accurate. A list of agency acronyms is included in Appendix C to this report.

**Table 4.2**  
**Cumulative Use of Voluntary Consensus Standards by Agency**

<b>Federal Agency</b>	<b>Total</b>
DOT/USCG	1,653
HUD	753
EPA	749
DOT/RSPA	579
DOL/OSHA	453
DOA/RUS	373
DOE	225
DOI/MMS	182
DOT/NHTSA	174
ATBCB	159
HHS/FDA	130
DOL/MSHA	84
NARA	44
CPSC	29
DOT/OPS	23
FTC	21
DOT/FRA	19
FCC	17
NRC	17
HHS/PHS	16
DOL/Public Contracts	13
DOI/OSM	12
HHS	10
Treasury, BATF	7
DOE/FERC	5
U.S. Army Corps of Engineers	5
HHS/Center for Medicare & Medicaid Services	4
Education	4
DOT/FAA	3
DOT/FMCSA	3
DOA/AMS	2
DOT/FHWA	2
HHS/HCFA	2
DOC/TA	1
DOA/CCC	1
DOJ	1
National Science Foundation	1
SBA	1
USAID	1
Grand Total	5,778

Source: NIST Inventory of Standards – November 2002



### **4.3 Cumulative Use of Government-Unique Standards by Agency**

Table 4.3 contains an inventory of the current total of government-unique standards incorporated by reference in the CFR. The data are separated by agency and were taken from NIST's initial inventory of standards incorporated by reference in the CFR developed in the past year. As noted before, NIST is in the process of refining and verifying the data it extrapolated from information in the Finding Aids sections of the FY 2001 edition of the CFR. The totals for some agencies are still under review but are believed to be 85 percent to 95 percent accurate. A list of agency acronyms is included in Appendix C to this report.

**Table 4.3**

**Cumulative Use of Government-Unique Standards by Agency**

<b>Federal Agency</b>	<b>Total</b>
EPA	739
DOT/USCG	257
HHS/FDA	190
HUD	189
DOI	52
DOA/RUS	33
DOT/NHTSA	27
DOI/OSM	22
DOL/Public Contracts	21
DOA/APHIS	20
DOT/RSPA	18
DOL/OSHA	16
DOL/MSHA	15
DOE	11
DOT/FAA	10
DOA/AMS	7
FCC	6
HHS/PHS	6
DOA/FSIS	6
DOA/GIPSA	6
DOC/NOAA/NMFS	6
USPS	6
ATBCB	4
Treasury, BATF	4
CPSC	3
DOT/FRA	3
DOT/FHWA	2
DOA/GIS	2
DOC/NIST	2
DOT/OPS	1
NRC	1
DOC/TA	1
Grand Total	1,686

Source: NIST Inventory of Standards – November 2002

## **V. PARTICIPATION OF FEDERAL AGENCY EMPLOYEES IN THE VOLUNTARY STANDARDS DEVELOPMENT PROCESS**

### **5.1 Census of Federal Employees Participating in Voluntary Consensus Standards Development Activities**

Reported federal employee participation in voluntary consensus standards development activities increased by 108 over last year's report. However, this number may be misleading because this year's report includes participation in all voluntary consensus standards development activities, rather than just participation in voluntary consensus standards committee activity. Expanding the scope of this part of the report is intended to capture such additional voluntary consensus standards development activities as subgroups of consensus standards development committees, independent task forces of standards development organizations, leadership positions on standards development organization boards, and other activities not counted in previous reports.

Federal agency resource commitments to voluntary consensus standards development activities go beyond mere participation on technical standards development committees. Various voluntary consensus standards development organizations often invite federal employees to serve in leadership positions. For example, several federal agencies have been asked to nominate senior staff members to serve on the American National Standards Institute's Board of Directors. Other agencies allow employees to serve in leadership positions in technical organizations such as the American Industrial Hygiene Association or the American Society of Safety Engineers. This commitment of federal agency resources in addition to technical standards development committees demonstrates a greater involvement of the federal government in the overall activity of voluntary consensus development organizations.

**Table 5.1**  
**Census of Federal Employees Participating in Voluntary Consensus Standards Development Activities**

Federal Agency	Number of Employees Participating in 2002	Change from Census Reported in 2001
DOE	681	+18
HHS	615	+334
DoD	461	-79
DOC	439	-1
DOI	300	+219
DOT	176	-1
NRC	144	+5
NASA	131	-8
USDA	82	+23
Treasury	66	-1
DOL	60	-16
GSA	44	+3
EPA	42	-4
CPSC	29	-2
VA	14	+2
NARA	13	+4
HUD	10	None
NCS	10	None
DOJ	5	None
FCC	5	None
Education	2	None
GPO	0	-2

Source: Agency Reports

## **5.2 Census of Voluntary Consensus Activities in Which Federal Employees Participated**

The total number of voluntary consensus activities in which federal employees participated declined by 354 from last year's report. This significant decline can be attributed to the necessary reevaluation of the commitment of agency personnel resources in light of reductions in agency workforce populations connected to budgetary restrictions, employee turnover, and retirements.

Many agencies are facing reductions in their FTE allotments due to budget restrictions. As a result, some committee positions are refilled when employees retire or leave for new positions. Further, the continued reliance of federal agencies on the outsourcing of standards development activities to the private sector has reduced the number of full-time federal employees available for participation in voluntary consensus standards activities.

Overall, many federal regulatory, and procurement activities have been reduced. The regulatory agendas and procurement priorities of many agencies have been reevaluated, and agency participation on many technical standards development bodies has been eliminated or reduced in priority. Accordingly, federal employee participation on voluntary consensus standards activities that are not directly related to the missions of regulatory and procurement agencies has been eliminated or curtailed.

However, it should be noted that while the number of activities in which federal employees participated has declined, the number of employees participating on these bodies has increased. This most likely demonstrates a greater commitment toward the allocation of limited agency resources to those voluntary consensus standards activities most directly affecting agency regulatory or procurement activity. Stretching limited agency resources over a large number of voluntary consensus standards activities may have a negative effect on the federal government's impact on the voluntary consensus standards process.

**Table 5.2**  
**Census of Voluntary Consensus Activities in Which Federal Employees Participate**

Federal Agency	Number of Consensus Activities in 2002	Change from Census Reported in 2001
DOC	165	-3
DOD	109	+54
DOE	57	-1
DOT	54	-114
USDA	51	+12
HHS	40	-17
NASA	36	+4
GSA	24	-83
EPA	22	+2
DOI	20	-9
VA	20	-4
DOL	15	-20
NCS	15	-3
NRC	15	-3
NARA	12	+7
CPSC	8	-1
Treasury	8	None
FCC	7	+6
HUD	5	None
DOJ	2	-1
Education	1	None
GPO	0	-2

Source: FY 2002 Agency Reports

### **5.3 Changes in Employee Participation**

In recognizing that more employees are participating on fewer committees, NIST believes that this results from several factors. First, financial resources for participation on technical committees and attendance at national, regional, or local Standards Development Organizations (SDO) conferences have been reduced due to departmental and agency budget constraints. Past resources for travel, per diem, membership dues, and organizational fees are no longer available, or have been severely curtailed. Second, many regulatory agencies are experiencing a reduction in the development of new departmental or agency regulations due to individual department or agency regulatory agendas. Regulatory agencies are issuing fewer new regulations and are not updating or revising older outdated regulations. Hence, expenses related to employee participation on the technical committees responsible for related national voluntary consensus standards is thought to be unnecessary in times of budget constraint. Finally, some departments and agencies have failed to replace retiring or reassigned employees on technical committees.

The overall impact of this decline in participation creates a void in the voluntary consensus standards development process. Technical input from federal employees serving on the various technical committees is necessary to ensure a continuing process of consensus. The views of the government, particularly regulatory or procurement agencies, add significantly to the openness of the consensus standards development process and help reduce or eliminate problems that may arise when the federal agencies choose to incorporate voluntary consensus standards into the federal standards inventory.

Further, federal employees serving on technical committees become familiar with the voluntary consensus standards process and the reasoning behind the development and promulgation of specific voluntary consensus standards. Participation on technical committees can serve as a learning experience for newer federal employees. Federal employees can bring back to their departments and agencies both an awareness of the technical discussions that occur during the development of a voluntary consensus standard and the rationale for decisions made by the committee. This awareness of the committee's actions may reduce or eliminate the need for redundant or extraneous discussions at the departmental or agency level as new or updated federal regulations are developed.

Additionally, the participation of established federal employees on technical committees and other consensus standards activities helps to maintain the knowledge and competence of the federal workforce as new technologies evolve in the marketplace. There is an opportunity for the federal government to develop or use newer voluntary consensus standards that reflect current technologies and offer alternative means of compliance with existing federal regulations. Regulated populations within the economy are not hampered or restrained by outdated federal rules and regulations that fail to recognize advances in marketplace technologies.

It is recommended that the departments and agencies of the federal government consider adopting and implementing strategies within the context of their individual strategic plans to increase federal employee involvement in the voluntary consensus standards development

process. This is essential if the federal government is to maintain, or even increase, its important role in the national voluntary consensus process.

#### **5.4 Inventory of Standards Development Organizations**

According to agency reports, federal agencies interact with at least 213 individual standards development organizations (SDOs). These include various consortia, ANSI-accredited SDOs, non-ANSI-accredited SDOs, and other organizations that develop product or performance standards. NIST surveyed the agencies to determine with which specific standards development organizations their employees interact during agency regulatory or procurement activities. As noted and discussed in previous sections, the number of federal employees participating in various standards development activities has increased while the number of standards development bodies they work with has decreased. NIST is seeking to establish with which bodies the agencies interact in order to provide guidance for federal agency participation directly related to an agency's regulatory or procurement activities. NIST can thus fulfill its coordination obligations under the NTTAA and OMB Circular as a clearinghouse for information on ongoing voluntary consensus standards activity provided by various agencies that interact with the various SDOs.

The following table shows the current inventory of SDOs on which federal agencies have reported employee representation.

## Inventory of Standards Development Organizations with Whom Federal Agencies Interact

Abbreviation		USDA	DoD	DoC	DoE	DoT	GPO	HHS	NARA	NASA	GSA	NSF
AA	Aluminum Association		X									
AABB	American Association of Blood Banks							X				
AAMA	American Architectural Manufacturers Association		X									
AAMI	Association for the Advancement of Medical Instrumentation		X					X				
AAMVA	American Association of Motor Vehicle Administrators					X						
AAPM	American Association of Physicists in Medicine							X				
AASHTO	American Association of State Highway and Transportation Officials					X						
AAR	Association of American Railroads					X						
AATCC	American Association of Textile Chemists and Colorists		X									
ABMA	American Bearing Manufacturers Association		X							X		
ABYC	American Boat and Yacht Council		X									
ACGIH	American Conference of Governmental Industrial Hygienists		X									
ACI	American Concrete Institute		X		X							
ACNP	American College of Nuclear Physicians							X				
ACR	American College of Radiology							X				
ACRI	Air Conditioning & Refrigeration Institute		X									
ADA	American Dental Association		X					X				
ADSC	American Dental Standards Committee							X				
AGA	American Gas Association										X	
AGMA	American Gear Manufacturers' Association		X									
AGS	American Glovebox Society				X							
AHA	American Hardboard Association		X									
AIA	Aerospace Industries Association of America									X	X	
AIAA	American Institute of Aeronautics and Astronautics		X		X					X		
AIHA	American Industrial Hygiene Association		X		X							
AIIM	Association for Information and Image Management		X		X		X		X	X		
AISC	American Institute of Steel Construction		X		X							
AITC	American Institute of Timber Construction		X									
AIUM	American Institute of Ultrasound in Medicine							X				
ALCA	American Leather Chemists Association		X									
ALI	Automotive Lift Institute - ALOIM										X	
AMCA	Air Movement and Control Association		X									
ANMC	American National Metric Council		X									
ANS	American Nuclear Society				X							
ANSI	American National Standards Institute	X	X		X	X	X	X			X	
AOACI	Association of Official Analytical Chemists International							X				
API	American Petroleum Institute		X									
APTA	American Public Transportation Association					X						
AREMA	American Railway Engineering & Maintenance-of-Way Assoc.		X									
ASA	Acoustical Society of America				X			X		X		
ASAE	American Society of Agricultural Engineers									X		



Abbreviation		USDA	DoD	DoC	DoE	DoT	GPO	HHS	NARA	NASA	GSA	NSF
ASC	American Society of Cinematographers		X									
ASCE	American Society of Civil Engineers	X	X		X	X						
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers		X		X							
ASM	American Society of Metals									X		
ASME	American Society of Mechanical Engineers		X		X	X		X		X	X	
ASNT	American Society for Nondestructive Testing		X		X					X		
ASQ	American Society For Quality		X		X					X		
ASQC	American Society of Quality Control							X				
ASSE(1)	American Society of Safety Engineers				X							
ASSE(2)	American Society of Sanitary Engineering		X									
ASTM	American Society for Testing and Materials	X	X		X	X		X	X	X	X	X
ATIS	Alliance for Telecommunications Industry Solutions		X									
AWEA	American Wind Energy Association				X							
AWI	Architectural Woodwork Institute		X									
AWPA	American Wood Preservers Association	X	X									
AWS	American Welding Society		X		X					X		
AWWA	American Water Works Association	X	X		X							
BHMA	Builders Hardware Manufacturers Association		X								X	
BOCA	Building Officials and Code Administrators International		X									
CAMI	Consortium for Advanced Manufacturing - International				X							
CEN	European Committee for Standardization							X				
CENELEC	European Committee for Electrotechnical Standardization							X				
CGA	Compressed Gas Association		X									
CGNS	Computational Fluid Dynamics (CFD) General Notation System									X		
CGSB	Canadian General Standards Board		X					X				
CI	Cordage Institute		X									
CIE	International Commission for Illumination							X				
CIRMS	Council on Ionizing Radiation Measurements and Standards				X							
CISPI	Cast Iron Soil Pipe Institute		X									
CMVSA	Commercial Motor Vehicle Safety Alliance					X						
CODEX	Codex	X						X				
CSI	Construction Specifications Institute		X		X							
CTI(1)	Cooling Technology Institute		X									
CTI(2)	Cooling Tower Institute				X							
DFI	Deep Foundations Institute		X									
DIN	Deutsches Institut für Normung - German Institute for Standardization							X				
DISAI	Data Interchange Standards Association, Inc.		X									
DSMO	Data Standards Maintenance Organization							X				
ECAMA	Electronic Components Assemblies & Materials Association		X									
ECGA	Electrical Generating Systems Association		X									
EDA	Electrostatic Discharge Association		X							X		
EIA(1)	Electronic Industries Alliance		X		X					X		
FAA NAVARRO	Navarro Committee				X							
GCA	Graphic Communications Association		X									

Abbreviation		USDA	DoD	DoC	DoE	DoT	GPO	HHS	NARA	NASA	GSA	NSF
GEIA	Government Electronics & Information Technology Association		X							X		
GSSA	Green Seal Standards for Adhesives										X	
GTB	Groupe de Travail Brussels					X						
HFESI(1)	Human Factors and Ergonomics Society, Inc.		X									
HFIA	High Frequency Industry Association		X									
HFS(1)	Human Factors Society				X							
HLS	High Level Seven							X				
HPB	Health Protection Branch, Health Canada							X				
HPS	Health Physics Society				X			X				
HPVA	Hardwood Plywood & Veneer Association		X									
IAEA	International Atomic Energy Agency				X							
IAI	International Alliance for Interoperability		X									
IAPMO	International Association of Plumbing and Mechanical Officials		X									
ICAC	Institute of Clean Air Companies		X									
ICAO	International Civil Aviation Organization					X						
ICBO	International Conference of Building Officials				X							
ICDD	International Center for Diffraction Data				X							
ICEA	Insulated Cable Engineers Association	X	X									
IEA	International Energy Agency				X							
IEC	International Electrotechnical Commission		X		X			X		X		
IEEE	Institute of Electrical and Electronic Engineers	X	X		X	X		X		X		
IES	Illuminating Engineering Society of North America		X					X				
UEST	Institute of Environmental Sciences & Technology		X								X	
IETF	Internet Engineering Task Force		X									
IIE	Institute of Industrial Engineers				X							
IIIA	International Imaging Industry Association								X			
IMO	International Maritime Organization					X						
IPC	Institute for Interconnecting and Packaging Electronic Circuits		X		X					X		
INMM	Institute of Nuclear Materials Management				X			X				
IOVW	International Organization of Vines and Wines							X				
ISTA	International Seed Testing Association	X										
ISAC	International Society for Analytical Cytology							X				
ISAS	The Instrumentation, Systems, and Automation Society				X							
ISBT	International Society for Blood Transfusion							X				
ISCVS	International Society for Cardiovascular Surgery							X				
ISO	International Organization for Standardization	X	X		X	X		X	X	X	X	
ISO/IEC	International Organization for Standardization/International Electrotechnical Commission				X							
ISOB	International Organization for Standardization in Microbiology							X				
ITE	Institute of Transportation Engineers					X						
ITI	Information Technology Industry Council		X		X							
ITRI	Interconnection Technology Research Institute									X		
ITS America	Intelligent Transportation Society of America					X						
IUPAC	International Union of Pure and Applied Chemistry							X				

Abbreviation		USDA	DoD	DoC	DoE	DoT	GPO	HHS	NARA	NASA	GSA	NSF
JEDEC	Joint Electron Device Engineering Council		X									
LIA	Laser Institute of America							X				
MMPA	Magnetic Materials Producers Association		X									
MPI	Master Painters Institute		X									
MSSVFI	Manufacturers Standardization Society of the Valve and Fittings Industry		X									
NAAMM	National Association of Architectural Metal Manufacturers		X									
NACE	National Association of Corrosion Engineers International		X		X					X		
NACLA	National Cooperation for Laboratory Accreditation				X			X				
NAFTA	NAFTA Land Transportation Standards Subcommittee					X						
NAPM	National Association of Photographic Manufacturers							X				
NARM	National Association of Relay Manufacturers		X									
NATDGS	North American Transport of Dangerous Goods Standards					X						
NCCLS	National Council of Chemical Laboratory Standards							X				
NCITS	National Committee for Information Technology Standards						X					
NCPDP	National Council for Prescription Drug Programs							X				
NCRPM	National Council of Radiation Protection and Measurements				X			X				
NCSL	National Conference of Standards Laboratories				X					X		
NCVHS	National Center for Vital and Health Statistics							X				
NEMA	National Electrical Manufacturers Association				X	X		X				
NFPA(1)	National Fire Protection Association		X		X	X		X	X	X	X	
NFPA(2)	National Fluid Power Association		X									
NHLA	National Hardwood Lumber Association		X									
NIBS	National Institute of Building Sciences		X								X	
NIRMAI	Nuclear Information and Records Management Association, Inc.				X							
NISO	National Information Standards Organization		X						X			
NPMA	National Petroleum Management Association		X									
NRECA	National Rural Electric Cooperative Association	X										
NSC	National Safety Council				X	X						
NSFI	NSF International		X									
NUBC	National Uniform Billing Committee							X				
NUCC	National Uniform Claim Committee							X				
OECD	Organization for Economic Cooperation and Development	X						X				
OLA	Optical Laboratories Association							X				
PDI	Plumbing and Draining Institute		X									
PHCCA	Plumbing-Heating-Cooling Contractors Association		X									
PIA	Parachute Industry Association		X									
PMI	Project Management Institute				X							
PRI	Performance Review Institute										X	
QCDS	Quarter-Inch Cartridge Drive Standards, Inc.		X									
RCC	Range Commander Council									X		
RESNA	Rehabilitation Engineering and Assistive Technology Society of North America							X				
RIA	Robotics Industry Association				X							
RMA	Rubber Manufacturers Association		X									
RTCA	Radio Technical Commission for Aeronautics									X		

Abbreviation		USDA	DoD	DoC	DoE	DoT	GPO	HHS	NARA	NASA	GSA	NSF
RTCM	Radio Technical Commission for Maritime Services									X		
RWMA	Resistance Welders Manufacturers Association		X									
SAE	Society of Automotive Engineers		X		X	X		X		X	X	
SAMA	Scientific Apparatus Makers Association		X									
SAWE	Society of Allied Weight Engineers		X									
SDA	The Soap and Detergent Association		X									
SDI	Steel Door Institute		X									
SES	Standards Engineering Society		X		X							
SFPE	Society of Fire Protection Engineers				X							
SFSA	Steel Founders Society of America		X									
SHACCNA	Sheet Metal & Air Conditioning Contractors Nat'l. Assoc.		X									
SIA	Security Industry Association				X							
SISO	Simulation Interoperability Standards Organization		X									
SNAME	Society of Naval Architects and Marine Engineers					X						
SPC	Society for Protective Coatings		X									
SPRI	Single Ply Roofing Institute				X							
SSPC	SSPC (The Society for Protective Coatings)										X	
STP	Society of Toxicological Pathologists							X				
SWI	Steel Window Institute		X									
TIA	Telecommunications Industry Association		X							X		
TOG	The Open Group		X									
TRAI	The Tire and Rim Association, Inc.		X									
TRB	Transportation Research Board					X						
TTMA	Truck Trailer Manufacturers Association		X									
UHMS	Undersea and Hyperbaric Medical Society							X				
UL	Underwriters Laboratories		X		X						X	
UNCFPPA	UN Centre for Facilitation of Procedures & Practices for Administration, Commerce & Transport		X									
UNECE	United Nations Economic Commission for Europe WP .29/GRSP	X				X						
USANC	U.S. Adopted Names Council							X				
USBGN	U.S. Board on Geographic Names											X
USP	United States Pharmacopoeia							X				
VITA	VITA Standards Organization		X									
W3C	World Wide Web Consortium		X									
WDMA	Window and Door Manufacturers Association		X									
WEDI	Workgroup for Electronic Data Interchange							X				
WMC	Workflow Management Coalition		X									
WRC	Welding Research Council				X							
WWPA	Western Wood Products Association		X									
WEF	Water Environment Federation	X										

## **VI. FEDERAL AGENCY CONFORMITY ASSESSMENT ACTIVITY**

### **6.1 Background**

Conformity assessment is defined in ISO/IEC Guide 2: 1996, as “any activity concerned with determining directly or indirectly that relevant requirements are fulfilled.” Conformity assessment procedures provide a means of ensuring that the products, services, or systems produced or operated have the required characteristics and that these characteristics are consistent from product to product, service to service, or system to system.

Conformity assessment includes: sampling and testing; inspection; certification; management system assessment and registration; accreditation of the competence of those activities and recognition of an accreditation program’s capability. A specific conformity assessment process may include one or more of these conformity assessment activities. While each of these activities is a distinct operation, they are closely interrelated. In addition, standards are interwoven into all aspects of these activities and can have a major impact on the outcome of a conformity assessment process.

Conformity assessment activities form a vital link between standards (which define necessary characteristics or requirements for products) and the products themselves. Together standards and conformity assessment activities affect almost every aspect of life in the United States.

### **6.2 Continuing Activity**

The following section contains information on federal agency conformity assessment activity as reported by the individual agencies. The information was taken directly from the reports the agencies submitted to NIST.

#### **6.2.1 Department of Commerce**

##### NIST Committee Participation

NIST’s Standards Services Division (NIST/SSD) continues to participate in the ANSI International Conformity Assessment Committee (ICAC), which serves as the U.S. Technical Advisory Group (TAG) to ISO’s Council Committee on Conformity Assessment (CASCO). SSD staff also continues to participate in CASCO Working Group 25 on alignment of ISO/IEC 17025 with ISO 9000/2000, Working Group 22 on a code of good practice for conformity assessment, and Working Group 20 on the revision of ISO/IEC Guide 7 on the inclusion of conformity assessment requirements in standards.

SSD staff also continues to be active in a CASCO ad hoc group on Regulators Interface and in working groups of the International Accreditation Forum (IAF).

NIST/SSD personnel continue to serve on the ANSI committee that is responsible for accrediting certification bodies and on the U.S. National Committee to the IECEE (IEC System for

Conformity Testing and Certification of Electrical Equipment). The latter is a worldwide scheme that allows manufacturers to obtain a test certificate from an approved U.S. National Certification Body (NCB) and to use this test report to obtain certification marks in other participating countries.

NIST/SSD staff also continues to participate in the U.S. Technical Advisory Group (TAG) to ISO TC 176, the ISO committee responsible for the development and maintenance of the ISO 9000 standards series, and in American Society for Quality (ASQ) Z-1, the U.S. committee responsible for adoption of the ISO 9000 series as U.S. national standards.

The Chief of SSD at NIST serves as the Chair of the ANSI-Registrar Accreditation Board National Accreditation Program Environmental Management Systems Council. The Council is responsible for accrediting registrars that assess facilities for conformance to the ISO 14001 standard.

NIST/SSD has published a number of directories and reports on conformity assessment-related issues and maintains a Web site (<http://www.ts.nist.gov/ca>) that provides a one-stop-shopping source for information on conformity assessment issues.

#### National Cooperation for Laboratory Accreditation (NACLA)

Section 12b of the National Technology Transfer and Advancement Act (NTTAA) of 1995 directed NIST to coordinate conformity assessment activities of federal, state, and local entities to eliminate unnecessary duplication of conformity assessment activities. In response, NIST continues to be a driving force behind the creation and functioning of NACLA. NACLA is composed of organizations in the United States, with observers from Mexico and Canada that actively support development of a system for recognizing the competence of testing and calibration laboratories leading to worldwide acceptance of test and calibration reports from those laboratories. Concerned with costly, multiple, duplicate assessments, and the lack of domestic or international recognition of laboratory accreditations, the group has explored solutions that could lead the United States, and perhaps eventually its North American Free Trade Agreement (NAFTA) partners, toward the goal of having only one assessment of a laboratory in a given field of testing, based on internationally accepted procedures. The NACLA vision is for a U.S. laboratory accreditation system that achieves the following goals:

- For the testing laboratory, a single accreditation in a given field of testing, with worldwide recognition of the laboratory's competence.
- For the manufacturer/supplier, a test performed once, with worldwide acceptance.
- For the acceptance body (that is a government agency or an industry specifier), an accreditation based on uniform criteria and intended to ensure that a laboratory is qualified to provide data of consistent quality.

In the past year, NACLA continued to improve its program and to take appropriate actions to align with the evolving international system for recognition of competent accreditation bodies. Some milestones during the period include the following:

- Adoption of a new version (Revision D) of the NACLA Recognition Procedure. The revision incorporates several procedural improvements that have been developed by the International Laboratory Accreditation Cooperation (ILAC).
- A meeting of NACLA officials with officials of the Asia Pacific Laboratory Accreditation Cooperation (APLAC) to discuss ways that the two organizations might cooperate, to the benefit of both.
- Recognition of an additional U.S. accreditation body: the American Industrial Hygiene Association (AIHA). There are now four accreditation bodies recognized by NACLA, including the NIST National Voluntary Laboratory Accreditation Program (NVLAP).
- Sponsorship of the first National Forum on Laboratory Accreditation. The event was well attended and well received. The second annual Forum is scheduled for March 2003.

The NIST Standards Services Division Chief is a member of the NACLA Operations Council and co-chairs the NACLA External Affairs Committee. Under the NIST-NACLA Memorandum of Understanding (signed July 2000), NIST recognizes NACLA as a suitable private sector alternative to NIST's National Voluntary Conformity Assessment System Evaluation (NVCASE) program. NIST relies on NACLA recognition of qualified accreditation bodies in support of NIST responsibilities as a designating authority under the U.S.-European Union Mutual Recognition Agreement (MRA), the APEC Telecommunications MRA, and the CITELE MRA. More than 100 laboratories have been designated as Conformity Assessment Bodies (CABs) under the provisions of the U.S.-EU and APEC MRAs, pursuant to this MOU.

#### National Voluntary Laboratory Accreditation Program

NIST/SSD's National Voluntary Laboratory Accreditation Program (NVLAP) operates in conformance with ISO Guide 58 and accredits calibration and testing laboratories to ISO/IEC 17025. NVLAP operates programs in response to congressional mandates and in support of several federal agencies, including the Department of Energy, the Nuclear Regulatory Commission, the Food and Drug Administration, the Department of Defense, the Environmental Protection Agency, and the Federal Communications Commission, and supports state and local governments.

#### **6.2.2 Department of Energy**

##### National Voluntary Laboratory Accreditation Program

DOE facilities, including Sandia National Laboratories, Pacific Northwest National Laboratory, Honeywell Federal Manufacturing and Technologies, Bechtel BWXT Idaho, and Oak Ridge Metrology Center, are accredited under the NIST NVLAP to perform calibrations in a variety of metrology parameters, including dimensional, radiation, physical, and electrical metrology. The scope of accreditation of each laboratory can be obtained from the NVLAP Web site located at <http://ts.nist.gov/ts/htdocs/210/214/214.htm>.

## Department of Energy Laboratory Accreditation Program (DOELAP)

Through DOELAP, DOE establishes specific performance testing requirements and site assessment criteria for accreditation of DOE personnel dosimetry systems and radio bioassay. DOELAP incorporates standards (including ISO/IEC Guide 25, *General Requirements for the Competence of Calibration and Testing Laboratories*, *Health Physics Society (HPS) Standards*, and *DOE Technical Standards*), establishes DOE organizational responsibilities and accreditation processes, and establishes procedures for administering DOELAP and for acquiring accreditation.

DOELAP evaluates the respective DOE personnel dosimetry or radio bioassay program's laboratory performance, based on performance testing criteria, and their operational competence, based on established "quality system" criteria regarding good laboratory practice. DOELAP is used for worker monitoring and protection at DOE and DOE contractor sites and facilities, as required in Title 10, Code of Federal Regulations, Part 835, "Occupational Radiation Protection."

## National Cooperation for Laboratory Accreditation

DOE has been active in founding and supporting NACLA, and is currently a member organization of NACLA and participates in managing NACLA activities.

## DOE Voluntary Protection Program (VPP)

DOE has established VPP criteria for its facilities' occupational safety and health programs, based on the Occupational Safety and Health Administration's (OSHA) VPP. These criteria establish a baseline that denotes compliance with all occupational safety and health standards, rules, and regulations. DOE conducts on-site evaluations to establish how successful DOE applicants for VPP have exceeded the baseline criteria.

## DOE Topical Committees (TCs)

The Department of Energy Technical Standards Program (TSP), within DOE's Office of Environment, Safety, and Health, has chartered a number of DOE Topical Committees that directly and indirectly advocate and support conformity assessment activities across DOE. These topical committees are composed of DOE and DOE contractor subject matter experts, and generally include members and observers from other federal agencies, industry, and standards development organizations. The TCs are chartered to coordinate with these groups on standards activities, including conformity assessment. DOE Topical Committees involved in conformity assessment activities include the following:

Metrology TC – Comprised of representatives from laboratories across the DOE complex, the Metrology TC coordinates the efforts of many DOE organizations involved in metrology and actively interacts with NIST, NASA, DOD, and other federal agencies in its activities. The group has developed a Web site that contains information on metrology capabilities at the



various DOE laboratories, past meeting minutes, committee members, and contacts, white papers on metrology issues, and future meeting announcements. The group is in the process of developing information on calibration uncertainty analysis procedures and supplier certification programs used in the various DOE laboratories.

Accreditation TC – Comprised of representatives from laboratories across the DOE complex, the Accreditation TC promotes unified laboratory accreditation activities across DOE and actively interacts with NACLA, ASCI, ISO, and other organizations to promote nationally and internationally recognized accreditation standards. The group has also developed a Web site that contains information on past committee meetings, committee membership and contacts, and white papers on accreditation issues.

Environmental Management Systems TC (EMS TC) – The EMS TC provides information and assistance to DOE organizations interested in establishing ISO 14000 certified environmental management programs. Several DOE sites achieved accreditation during the year.

Quality and Safety Management Special Interest Group/Quality Assurance Topical Committee – The QSM SIG/QA TC develops, improves, and provides management information related to quality and safety issues involving the DOE community, including information and assistance to DOE organizations interested in ISO 9000 criteria or a move from DOE specific standards to industry consensus standards.

High Efficiency Particulate Air (HEPA) Filter Qualification Testing/HEPA TC – The DOE conducts functional and quality testing of HEPA filters, used in critical applications at DOE facilities, at a designated facility for HEPA filters to ensure conformance with ASTM standards and to help ensure adequate performance in safety applications.

Biota Dose Assessment Topical Committee (BDATC) – The BDATC has broad representation from DOE offices, national laboratories, universities, and the private sector. The BDATC brings together the expertise in health physics, radioecology, environmental monitoring, and risk assessment as a resource base for DOE on biota dose assessment. It coordinates these interests to establish common standards and processes for biota dose assessment across DOE, the United States, and internationally. Through its standard, the BDATC provides radiation dose evaluation methods that can be used to meet DOE requirements. The international community, including the IAEA and the Atomic Energy Control Board (AECB) of Canada, are interested in broader application of the DOE BDATC standard.

Meteorology Topical Committee (MTC) – The DOE MTC works across DOE, with other federal agencies, and with the American Nuclear Society (ANS) to help promote the use of ANS 3.11 as a replacement for various agency standards. The MTC can also provide on-site evaluations of on-site meteorology programs to support implementation of the new ANS 3.11 standard.

### **6.2.3 Department of Health and Human Services**

#### U.S. Food and Drug Administration

The Center for Devices and Radiological Health (CDRH) has liaison with the ANSI Accreditation Committee, the ANSI International Conformity Assessment Committee, ANSI Board Committee on Conformity Assessment, and ASTM Committee E-36 on Conformity Assessment. The Center uses suppliers' declaration of conformity as described in ISO/IEC Guide 22 in its standards recognition program and has developed an MRA with the European Union on mutual recognition of each other's conformity assessment procedures related to manufacture and marketing of medical devices.

The Center for Veterinary Medicine (CVM) inspects drug manufacturers for compliance with current Good Manufacturing Practices (cGMP) requirements and inspects laboratories that provide pivotal animal studies for drug approvals for compliance with Good Laboratories Practices.

The Office of Regulatory Affairs (ORA) actively participates with the National Cooperation for Laboratory Accreditation (NACLA). An ORA official is a member of the NACLA Operations Council and has the role of participating in the NACLA Recognition Committee for Accrediting Bodies who apply for mutual recognition. Other FDA officials participate with NACLA in the evaluation of accrediting bodies under ISO/IEC 58 and ISO/IEC 17025 and sit on NACLA technical committees.

ORA officials are also involved with Codex Alimentarius activities, especially in the area of pesticide residues, which relies on methods development by ISO and AOAC. Other activities include participation and the coordination of federal-state conferences to develop uniformity in the reporting of food testing results. The ISO/IEC 17025 standard is the foundation in this coordination effort.

#### Agency for Healthcare Research and Quality

The Agency for Healthcare Research and Quality (AHRQ) is the government's leading agency in the development and deployment of evidence-based research on health care quality and costs. One key area of this work is AHRQ's support for voluntary consensus standards use in the health care field. As the leading agency sponsoring research on health care quality that will support clinical health care system and public policy decision makers, AHRQ regularly is involved in evaluating health care standards across the spectrum of patient care. AHRQ's Evidence-Based Practice Centers (EPCs) includes 13 centers across the country and in Canada that are available to public and private partners seeking to research disease conditions and standards of care for those conditions. Numerous EPC reports have been used as crucial inputs of evidence in larger consensus-based standards processes. AHRQ's National Guidelines Clearinghouse (NGC) is a public resource for evidence-based clinical practice guidelines. NGC is sponsored by AHRQ in partnership with the American Medical Association and the American Association of Health

Plans. The NGC is nationally recognized archive for numerous standards, including voluntary consensus standards.

#### **6.2.4 Department of Housing and Urban Development**

The Department continues to operate 25 conformity assessment programs, under the HUD Building-Products Standards & Certification Programs. All of the programs comply with the ISO guidelines and procedures. These are the same standards used by ANSI and other nationally recognized third-party certification agencies.

#### **6.2.5 Department of Justice**

The Office of Science and Technology of the National Institute of Justice (NIJ) in collaboration with NIST continues to sponsor the Office of Law Enforcement Standards (OLEES). The OLES develops methods for testing equipment performance; develops methods for examining evidentiary materials; develops standards for equipment and operating procedures; develops standard reference materials; and performs other scientific and engineering research as required by the criminal justice and public safety communities. This interagency cooperative effort results in improvements in the quality and consistency of various conformity assessment requirements and processes at the federal, state, and local levels.

#### **6.2.6 Department of Transportation**

##### Federal Railway Administration (FRA)

The FRA's conformity assessment activities are visible internationally through expanded efforts in the area of safe, uniform international transport of hazardous materials by participation in the Canadian General Standards Board Tank Car Committee and the ASME Transportation Pressure Vessel Committee, as well as continuing to participate in the North American Transport of Dangerous Goods Standard (NATDGS) Working Group and the AAR Tank Car Committee, as reported last year. Participation in six voluntary consensus standards bodies as well as in numerous committees and sub-committees of those bodies gives FRA access to the developmental stages of private sector conformity assessment standards to make sure the agency viewpoint is considered in the development of their standards.

#### **6.2.7 Department of the Treasury**

The standards that Treasury bureaus have adopted will continue to involve conformity assessment activities, which include internal audit and eventual certification in conformance with acceptable practices.

#### **6.2.8 Agency for International Development**

The agency continues to participate in the Contractor Performance Reporting system developed and managed by the National Institutes for Health, including participating as a member of the

committee that determines information requirements. This may be considered a conformity assessment activity since it is standardizing the way that the participating agencies assess contractors' performance.

### **6.2.9 General Services Administration**

#### Green Seal

Green Seal is an independent, non-profit “third party certification” organization devoted to the creation of scientific evaluation criteria for environmentally preferred products. These criteria are then used to provide credible, objective, and unbiased product review. In addition, a list of relevant Green Seal standards and Green Seal recommended products is maintained on the GSA Hardware SuperStore Web page under “Environmental Issues.”

#### National Institute of Building Sciences (NIBS)

#### Master Painters Institute (MPI)

#### Scientific Certification Systems (SCS)

GSA continues to provide suppliers with the option of certifying their products under the SCS Specification for Architectural and Anti-Corrosive Paint. This was a joint effort by the National Institute of Building Sciences (NIBS), Master Painters Institute (MPI), ICI Paint, the Department of Defense, the General Services Administration, the Chemical Manufacturers’ Association, and the Scientific Certification Systems. This criteria is based on International Organization for Standardization (ISO) Standard 14042, as prepared by Technical Committee ISO/TC 207, Environmental Management Subcommittee SC 5, Life Cycle Assessment and has been adopted as a standard by MPI. In addition, a copy of this standard and a list of SCS Certified products are maintained on the GSA Hardware SuperStore Web page under “Environmental Issues.”

#### Clean Air Act National Emission Standards for Hazardous Air Pollutants (CAA/NESHAP) Compliance for Shipbuilding and Aerospace coatings

The Clean Air Act (40 CFR Subpart 63.741-63.753 and 63.780) designate “Shipbuilding and Ship Repair Facilities” and “Aerospace Manufacturing and Rework Facilities” as a regulated emissions source categories. Clean Air Act rules limit the volatile organic hazardous air pollutant (VOHAP) content of several types of solvents, coatings, strippers, and maskants used within these industrial categories. Compliance is based on proper documentation that volatile organic compound (VOC) or VOHAP emissions were within allowable limits. For select items regulated by the NESHAP, the GSA Hardware SuperStore continued to collect brief technical data certificates that provide much of the data that the U.S. EPA requires the coating end user to maintain at their location. These certificates were then faxed to the Department of Defense liaison office. Also, GSA provided input to how to structure a new Web site that is to offer these documents electronically in the future.

## Hazardous Material Information Resource System (HMIS) Functional Working Group

The HMIS Functional Working Group (FWG) is chartered under the sponsorship of the HMIS Policy Working Group (PWG). Its role is to represent the users of hazardous materials information and management systems that deal with Material Safety Data Sheets (MSDS) or related/associated technical information, and strive to ensure that the functional needs of those users are met. In addition, the FWG prepares recommendations to the PWG on issues pertaining to the functional aspects of improvements to existing or future DOD hazardous materials information and management systems. The core FWG membership consists of voting representatives from the Army, Air Force, Navy, DLA, and GSA.

### **6.2.10 National Aeronautics and Space Administration (NASA)**

As an acquisition-oriented agency, conformity assessment is a major element of NASA's policies and procedures to assure the safety and mission success of NASA programs. NASA is continuously evaluating and improving our conformity assessment practices and procedures.

NASA has a long-standing practice of working with other government agencies and the public sector to integrate best practices into our activities. NASA continues to work with the Department of Defense (DOD) and the aerospace industry to adopt and define consistent quality practices. NASA routinely utilizes other government agencies to assist us with Contract Administration Services (CAS) including substantial conformity assessment activities. The Defense Contract and Audit Agency, Defense Contract Management Agency, Office of Naval Research, and other activities continue to provide conformity assessment services for NASA programs. These are ongoing relationships that utilize the expertise and infrastructure that are resident within these agencies and allow NASA to limit their internal assessments to areas where external capabilities are not available. The management and monitoring processes established for these CAS activities provides a mechanism to continually exchange ideas and best practices related to conformity assessment.

Finally, NASA is pursuing Star status in the Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP). Participation in the VPP provides a mechanism for both improving internal safety practices and for utilizing the services of the OSHA programs to perform oversight inspections. To date the Langley Research Center and the Johnson Space Center have achieved Star status and have been recognized by OSHA. The other NASA Centers are in various stages of preparation for assessment by OSHA.

### **6.3 New Activity**

The following section contains information on new federal agency conformity assessment activity as reported by the individual agencies. The information was taken directly from the reports the agencies submitted to NIST.

### **6.3.1 Department of Commerce**

#### Telecommunications Certification Bodies (TCB) Program

In May 2000 NIST initially evaluated ANSI's Conformity Assessment Program for compliance with ISO/IEC Guide 61 and the Federal Communications Commission requirements for its TCB program. Upon successful completion of an on-site assessment and two witness audits, NIST recognized ANSI's Conformity Assessment Program for a period of two years. In May 2002, NIST re-evaluated ANSI and extended its recognition for two more years.

#### National Information Assurance Partnership (NIAP)

NIST and the National Security Agency (NSA) have established a program under the National Information Assurance Partnership (NIAP) to evaluate IT product conformance to international standards. The program, officially known as the NIAP Common Criteria Evaluation and Validation Scheme for IT Security, or Common Criteria Scheme in abbreviated form, is a partnership between the public and private sectors. NAIP assessment programs are based on national and international IT security standards and criteria. The initial assessment programs will focus on the testing and evaluation of commercial IT products; follow-on programs will address the assessment of IT systems and networks to support the system certification and accreditation processes. Present IT product testing programs include the NIAP Common Criteria Evaluation and Validation Program (see more at <http://niap.nist.gov/cc-scheme/>) and the NIST Cryptographic Module Validation Program (see <http://csrc.nist.gov/cryptval/>).

### **6.3.2 Department of Health and Human Services**

#### U.S. Food and Drug Administration

The Office of Regulatory Affairs laboratories are finalizing and implementing the new quality system in preparation for accreditation to ISO 17025.

The Center for Biologics Evaluation and Research (CBER) laboratories that conduct official product testing are in the process of becoming ISO 17025 accredited. CBER has conducted initial staff training and is in the process of writing a Laboratory Quality Assurance Manual centrally documenting Center policies and procedures related to the official testing of regulated biological products. CBER is implementing a quality management software tool to assist in the effort, and has quality insurance managers to coordinate the implementation of an ISO 17025-based quality system.

In addition, CBER has recently initiated activities with a variety of organizations that may result in the development of standards mostly for cellular therapies and tissue products. These organizations include, the American Society for Reproductive Medicine, the American Association of Tissue Banks, and Eye Bank Association of America.

CBER has also participated in a collaborative effort with other U.S. governmental and nongovernmental organizations, including the National Institute of Standards and Technologies, the National Cancer Institute, and the College of American Pathologists in developing reference material and guidance to test for the presence of Her2 gene protein. Consistent methodology for detecting Her2 neu gene protein is necessary for treatment of breast cancer with the therapeutic monoclonal antibody, trastuzumab (Herceptin).

CBER also organized an Adenovirus Reference Materials Working Group that developed an adenoviral virus reference material. This material was developed in a unique collaborative effort with donations from multiple organizations and institutions. The reference material is used to define the particle unit and infectious units for adenovirus vectors used in gene therapy.

#### Centers for Medicare and Medicaid Services (CMS)

Although CMS was involved in a limited number of conformity assessment activities to assure adherence by their contractors to the national health care payment standards, it is anticipated that these activities will increase significantly in future years. In addition, CMS participated in interagency efforts to harmonize health care standards implementation activities under the Health Insurance Portability and Accountability Act (HIPAA) with other federal agencies, including the Department of Defense, the Veterans Administration, and state Medicaid agencies. They also conducted a review of private sector certification services available that could assist in establishing a mechanism to better certify the use of health care standards by contractors. CMS contracted with Claredi to conduct certification reviews to evaluate compliance of the Medicare contractor implementation of HIPAA transaction standards in FY 2002. CMS also directed each of their contractors to conduct extensive internal testing of the programming for those implementations.

CMS is also participating with the National Forum for Health Care Quality Measurement and Reporting in the endorsement of standards for performance measures of quality among various providers. This effort brings together all stakeholders to make a determination founded in a membership-driven consensus process and an evidence base for the subject matter. The various endorsements will occur over the next two years.

### **6.3.3 Department of Transportation**

#### Federal Motor Carrier Safety Administration (FMCSA)

The FMCSA has used, or proposed, voluntary consensus standards agreed to by the Commercial Vehicle Safety Alliance's Information Systems Committee to determine what data elements should be collected and coded into state and national inspection and crash files. The decisions agreed to by this committee affect state enforcement personnel, the trucking industry, and anyone using the safety data. As called for in Section 225 of the Motor Carriers Safety Improvement Act of 1999 (Public Law 106-159, 113 Stat. 1748), the FMCSA has worked with the National Highway Traffic Safety Administration and the states to adopt the Commercial Vehicle Analysis Reporting System. Since the beginning of calendar year 2001, an average of

one staff member has participated in meetings with a number of states to gauge their commitment to participating in this new crash data collection approach. Although still in the pilot stage, the FMCSA asked states to ensure that certain crash data are reported in an accurate, timely, and complete manner.

#### **6.3.4 General Services Administration**

##### ISO SC 10 TC 29

The U.S. Technical Advisory Group (TAG) is responsible for determining the U.S. position on IEC/ISO standards pertaining to technical committee or subcommittees in addition to the review of policy matters. The standards include hand tools and accessories for safety requirements relating to the elements of design, use, and selection of performance, tolerances, and outline configurations of (including but not limited to) wrenches, pliers, screwdrivers, shears, punches, chisels, hammers, and toolboxes. The standards will include the development of requirements, the consideration of various types and classes of hand tools and accessories required for specified classes of service, and the tests needed to determine conformance with the service classification requirements.

##### American Society of Mechanical Engineers (ASME), B107 Main Committee

GSA's Hardware SuperStore is a member of the ASME B107 main committee relating to hand tools, and actively participates in the development of non-government procurement and safety standards. This committee is actively involved in maintaining and improving standards to assure customer requirements are satisfied.

##### Tool Fastener Working Group

The goal of this group is to improve the performance of fastener systems by evaluating at the tool-fastener interface, in addition to creating a review committee to evaluate and improve non-government standards.

##### Joint Group on Environmental Attribute (JGEnvAtt) meeting – GSA/ Department of Defense/ Other Federal Agency, HQ DLA, Fort Belvoir, Virginia

On February 21, 2002, GSA summarized to attendees the latest Hardware SuperStore's efforts in delineating those FSC 8010 products that meet the definition of "Low-VOC." We interfaced with key DOD and EPA personnel to learn of the latest efforts to delineate products with environmental attributes. We gathered and brought back references on the latest, four approved environmental attributes, of which "Low-Volatile Organic Compound" (Low-VOC) is one.

##### National Defense Industrial Association/ Department of Defense

From March 25 through March 28, 2002, GSA staff attended the 28th Annual Environmental Symposium and Exhibition sponsored by the Department of Defense in Charleston, South



Carolina. GSA gathered detailed data on potential suppliers, and DOD/ Navy/ Marine Corps/ U.S. EPA environmental initiatives that affect our commodities. We learned of new environmental initiatives within the Department of Defense and were able to visit 110 governmental and private booth exhibits, and interface with an estimated 150 Department of Defense customers.

From August 19 through August 22, 2002, GSA attended the 7th Annual Joint Service Pollution Prevention Symposium and Exhibition sponsored by the Department of Defense. GSA created and presented a 20-minute presentation on how to identify and purchase “Low-Volatile Organic Compound (Low-VOC)” coatings from GSA. The presentation was attended by 40 people. We networked with over 100 customers, and visited over 200 private companies and government agency exhibits.

#### National Aerospace Defense Contractors Accreditation Program (NADCAP)

NADCAP represents major prime contractors, suppliers, and government agencies in aerospace, defense, and related industries throughout the United States and internationally. NADCAP is administered by the Performance Review Institute (PRI), an independent, for-profit trade association affiliated with the Society of Automotive Engineers (SAE). Through NADCAP, PRI accredits subcontractors and suppliers to aerospace and industry consensus standards. Through NADCAP, PRI assures and enhances quality, saves valuable time and efforts, and cuts direct and overhead costs by performing the following functions:

- Compiling audit criteria
- Securing acceptance of these lists as internationally recognized ASE Aerospace Standards
- Auditing suppliers’ technical capabilities and conformance to applicable procedures and/or government agencies
- Focusing the responsibility for quality maintenance on the supplier and subcontractors
- Publishing a qualified manufacturer’s list and making it available to prime contractors
- Promoting the benefits of using accredited suppliers

The GSA Hardware SuperStore is a prime member of the Sealants and Coating Groups and is a member of the Qualified Product Management Council.

#### Society of Automotive Engineers (SAE)

The GSA Hardware SuperStore is a member of the SAE, G8 – Aerospace Coatings Committee and G9 – Aerospace Sealants Committee, and actively participates in the development of Aerospace Material Standards. These committees are actively involved in the conversions of Military Specifications and the development of Aerospace Material Standards.

The goal of the Chairman of the G8 – Laboratory Accreditation Sub-Committee is to develop a laboratory accreditation protocol consistent with ISO and IEC accreditation standards. This standard, AS5505, May 2001, provides interpretation of ISO/IEC 17025 and establishes

additional requirements for accreditation of testing laboratories for evaluating organic coatings. This step was necessary for the development of the Qualified Manufacturers List program for G8 – Aerospace Coatings.

#### Building Products Pre-Approval Program (BPPAP)

GSA/FSS sends a Hardware SuperStore representative to the Building Products Pre-Approval Program (BPPAP) Committee of the National Institute for Building Sciences, Washington, D.C. This committee coordinates the development of non-governmental architectural and industrial paint and coatings standards with the Master Painters Institute. Through this committee, more than 26 Federal Specifications and Commercial Item Descriptions have been replaced with Master Painters Institute Standards.

The BPPAP committee, through Scientific Certifications Systems (SCS) (a third party, internationally recognized certification organization), is pursuing development of Environmentally Preferred Purchasing (EPP), and certification for products, mandated by Executive Order 13101. The BPPAP reviews and approves the protocol for EPP certification that SCS performs.

#### USDA Forest Service

In April 2002, GSA attended a joint meeting with representatives from the USDA Forest Service Missoula and San Dimas Technology & Development Centers. We discussed new requirements for wildland fire suppression equipment and abolishing the practice of allowing third-party certification to NFPA standards for protective clothing and equipment. As a result, future GSA contractors for wildland fire fighter clothing and personal protective equipment will be required to be ISO registered. The requirement will be phased in over a period of approximately three years.

GSA/FSS sends a Hardware SuperStore representative to the USDA, Forestry Service, Tree Marking Paint Standard Development Committee. The GSA provided expert consultation for environmental, health, and technical issues leading to development of the FS 2400-400 specification.

#### National Fire Protection Association (NFPA) Technical Committee on Wildland Fire Fighting Protective Clothing and Equipment

GSA attended the committee's meetings in Seattle, Washington (May 2002), and Missoula, Montana (August 2002). As part of the revision process of the National Fire Protection Association's (NFPA) Standard 1977 (Protective Clothing & Equipment for Wildland Fire Fighting), the government-unique requirements for the fire shelter will be dropped from the standard. A performance-based standard will be developed for inclusion in the following revision of NFPA 1977. A new government (Forest Service) specification for a new, improved design of the fire shelter is just now being implemented and it was determined that adequate performance data could not be developed in time for the upcoming revision of NFPA 1977.

## APPENDIX A--REPORTS OF CABINET-LEVEL DEPARTMENTS

This section contains the actual reports of the various cabinet-level department reports as submitted to NIST. Due to the need to have this year's information submitted via e-mail rather than through NIST's online process, many different formats were used by the various departments to submit their information. Several departments chose not to address the voluntary questions 7, 8, and 9. The information in this section reflects NIST's effort to present in a consistent format all of the data the departments chose to submit. The substantive text and numerical responses of each department's report remains as submitted.

The format NIST has chosen to present the submitted data is as follows:

### **Name of Department**

1. Number of Government-Unique Standards used in lieu of Voluntary Consensus Standards.
2. Number of Voluntary Consensus Standards substituted for Government-Unique Standards.
3. Number of Voluntary Consensus Standards used in FY 2002.
4. Number of agency employees participating in Voluntary Consensus Standards activities.
5. List of Voluntary Consensus Standards Bodies in which there was agency participation.
6. How agencies report their use of standards.
7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.
8. Conformity assessment activities in which agencies were involved.
9. Examples or case studies of standards successes.
10. Additional comments.

## Department of Agriculture

1. As required by P.L. 104-113, identification of all instances where the agency used government-unique standards in lieu of voluntary consensus standards (for each instance, include agency rationale for such case, as well as the specific government-unique standard used and the voluntary consensus standard that was not selected).

0

2. Identification of voluntary consensus standards that have been substituted for government-unique standards because of an agency review under section 15b (7) of the Circular.

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In those cases where USDA's Agricultural Marketing Service (AMS) uses government-unique standards, no voluntary consensus standards exist.

The American Dairy Products Institute (ADPI) has published a series of milk and dry milk standards that can be used when USDA certification is not requested by the buyer or seller. These standards are based on the USDA standards and contain the same requirements. The majority of the dairy industry prefers the USDA certification because of its official certificate value.

AMS also uses government-unique specifications for the School Lunch Program's commodity purchases and other domestic feeding programs to meet the nutritional and/or program requirements. USDA develops unique specifications to meet the needs of the food program. USDA's specifications may not be consistent with all commercial products in that they allow for less salt, fat, and sugar.

3. The number of voluntary consensus standards that the agency has used during FY 2002, based upon procedures set forth in sections 11 and 12 of the Circular.

177

4. The number of agency employees participating in voluntary consensus standards activities.

82

5. The number of voluntary consensus standards bodies in which the agency participates by name and acronym.

51

3A Sanitary Standards Program (domestic dairy equipment standards writing body).

3A/NSF Meat and Poultry Equipment Standards (domestic meat and poultry equipment standards writing body).

International Dairy Federation (international standards body) IDF.

CODEX Committee on Milk and Milk Products (international standards body). A member of the Dairy Program serves as U.S. Delegate to this committee.

American Society for Testing Materials (ASTM).

International Standards Organization (ISO).

Universal Standards Agreement.

United Nations Economic Commission for Europe (UNECE) meetings of the Working Party on the Coordination of Standardization of Perishable Produce and Quality Development. A member of the Fruit and Vegetable Programs, Fresh Products Branch served as the Vice-Chair during the past year and was elected Chairman of the Working Party during the November 2002 meeting.

UNECE Specialized Section on the Standardization of Fresh Fruits and Vegetables. A member of the Fruit and Vegetable, Fresh Products Branch served as Chairman of the 2002 meeting.

UNECE Specialized Section on the Standardization of Dry and Dried Fruit

Codex Committee on Processed Fruits and Vegetables (CCPFV). A member of the Branch currently serves as Chairman of the CCPFV.

Codex Committee on Fresh Fruits and Vegetables

Codex Ad Hoc Task Force on Fruit & Vegetable Juices

Codex Committee on Processed Fruits and Vegetables

Codex Working Group on Certain Processed Vegetables

Codex Working Group on Jams, Jellies, and Marmalades

Codex Working Group on Canned Citrus Fruits

American National Standards Institute (ANSI) Government Member Council (GMC). The Livestock and Seed Program is a member of the ANSI Government Member

Council, which provides a forum for the discussion of government standards and conformity assessment issues as they relate to the American National Standards Institute and its members. Representatives of virtually every federal department participate in the ANSI GMC.

United Nations/Economic Commission for Europe Committee for Trade Industry and Enterprise Development. Meeting of Experts for the Standardization of Meat, April 8-10, 2002, Geneva, Switzerland. The Livestock and Seed Program is the Chair of this international committee that has representation on it from countries coming from North America, South America, Europe, and Asia. At the meetings earlier this year, the Committee adopted an international lamb cutting and quality standard.

International Organization for Standardization (ISO) Technical Committee 176 for Quality Management and Quality Assurance

ISO Technical Committee 34 for Food Products/Subcommittee 6 for Meat and Meat Products

American Society for Testing and Materials (ASTM) International

Industry-wide Cooperative Meat Identification Standards Committee (ICMISC). The ICMISC is a committee composed of industry, government, and academic representatives that maintains the voluntary standard nomenclature for retail labeling of beef, pork, lamb, and veal cuts.

International Seed Testing Association (ISTA)

Organization for Economic Co-operation and Development (OECD) Seed Schemes

Poultry Program employees hosted the UN/ECE Committee for Trade Industry and Enterprise Development, Meeting of Experts for the Standardization of Meat, October 29-31, 2001, Washington, DC.

UN/ECE Committee for Trade Industry and Enterprise Development, Meeting of Experts for the Standardization of Meat, April 8-10, 2002, Geneva, Switzerland.

UN/ECE Committee for Trade Industry and Enterprise Development, Meeting of Experts for the Standardization of Meat, September 16-18, 2002, Rennes, France.

Meat and Poultry Business-to-Business Data Standards Organization (mpXML). This body is a not-for-profit industry corporation created to establish e-commerce standards for the meat and poultry supply chain.

American National Standards Institute (ANSI) committee to update the "Accessible and Usable Building and Facilities" ICC/ANSI A117.1-2003.

Access Board committee working to combine the two major federal standards, the Uniform Federal Accessibility Standards (UFAS) and American with Disabilities Act Accessibility Guidelines (ADAAG).

Southern Building Code Congress International, Inc. (SBCCI)

Building Officials and Code Administrators International, Inc (BOCA)

International Conference of Building Officials (ICBO)

Council of American Building Officials (CABO)

National Fire Protection Association (NFPA)

International Code Council (ICC)

Federal Manufactured Housing Construction Safety Standard (FMHCSS)

American Wood Preservers' Association (AWPA)

American Society of Civil Engineers (ASCE)

American Concrete Institute (ACI)

Prestressed Concrete Institute (PCI)

American Welding Society (AWS)

International Conference of Building Officials (ICBO)

Uniform Building Code (UBC)

Southern Pine Inspection Bureau (SPIB)

West Coast Lumber Inspection Bureau (WCLB) Grading Rules

Institute of Electrical and Electronics Engineers (IEEE)

Insulated Cable Engineers Association (ICEA)

Alliance for Telecommunications Industry Solutions (ATIS) Protection Engineers' Group

American Water Works Association (AWWA)

6. Describe how your agency currently reports its use of voluntary consensus standards. Specifically, you should be prepared to answer the following questions: (Note: Questions will be structured on the Web entry database to accept either “Yes/No” or multiple-choice responses.)
- a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards or (3) both first time and continued uses of standards?
- USDA reports continued uses of standards.
- b. Does your agency report (1) the total number of standards it uses or (2) each instance where the agency uses (i.e., references) a standard?
- USDA reports total number of standards it uses.
- c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?
- USDA reports one standard used.
- d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?
- USDA reports both standards that it uses for guidance purposes and compliance purposed.
- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?
- No.
7. An evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.
- USDA concurs that the standards policy stated in Circular A-119 is effective in reducing duplicate systems of standards. It effectively defines the role and coordinates the use of government-unique standards in the marketplace.
8. No comment.
9. No comment.
10. No comment.



## Department of Commerce

1. Number of government unique standards used in lieu of voluntary standards.  
0
2. Number of voluntary consensus standards substituted for government unique standards.  
0
3. Number of voluntary consensus standards used in FY 2002.  
0
4. Number of agency employees participating in voluntary consensus standards activities.  
439
5. Number of voluntary consensus standards bodies in which there is agency participation.  
165
6. Describe how your agency currently reports its use of voluntary consensus standards.  
  
The Department of Commerce reported no use of voluntary consensus standards during FY2002.
7. Provide an evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.  
  
In general, NIST finds that the Circular provides satisfactory guidance to federal agencies regarding how to comply with PL 104-113. With regard to the definitions of “use” as it relates to federal agency use of voluntary consensus standards, NIST is leading the effort among member agencies of the ICSP to reach agreement on clarification of this term. Agreement within the ICSP on these clarifications should result in greater consistency in the data reported by federal agencies to NIST for inclusion in future annual reports.
8. Provide the conformity assessment activities in which the agency has been involved.

### Telecommunications Certification Bodies (TCB) Program

In May 2000, NIST initially evaluated American National Standards Institute’s (ANSI’s) Conformity Assessment Program for compliance with ISO/IEC Guide 61 and the Federal Communications Commission (FCC) requirements for its TCB program. Upon successful completion of an on-site assessment and two witness audits, NIST recognized

ANSI's Conformity Assessment Program for a period of two years. In May 2002, NIST re-evaluated ANSI and extended its recognition for two more years.

ANSI evaluates prospective TCBs for compliance with ISO/IEC Guide 65 and FCC requirements for the TCB program. FCC requires that a TCB must have core testing capability and that the testing laboratory must be accredited to ISO/IEC Standard 17025. NIST recommends thus accredited organizations to FCC for designation as TCBs.

#### NIST Committee Participation

NIST's Standards Services Division (NIST/SSD) participates in the ANSI International Conformity Assessment Committee (ICAC), which serves as the U.S. Technical Advisory Group (TAG) to ISO's Council Committee on Conformity Assessment (CASCO). SSD staff also participates in CASCO Working Group 25 on alignment of ISO/IEC 17025 with ISO 9000/2000, Working Group 22 on a code of good practice for conformity assessment, and Working Group 20 on the revision of ISO/IEC Guide 7 on the inclusion of conformity assessment requirements in standards. Further, SSD staff is active in a CASCO ad hoc group on Regulators Interface and in working groups of the International Accreditation Forum (IAF).

NIST/SSD personnel serve on the ANSI committee that is responsible for accrediting certification bodies and on the U.S. National Committee to the IECEE (IEC System for Conformity testing and Certification of Electrical Equipment). The latter is a worldwide scheme that allows manufacturers to obtain a test certificate from an approved U.S. National Certification Body (NCB) and to use this test report to obtain certification marks in other participating countries.

NIST/SSD also participates in the U.S. Technical Advisory Group (TAG) to ISO TC 176, the ISO committee responsible for the development and maintenance of the ISO 9000 standards series, and in American Society for Quality (ASQ) Z-1, the U.S. committee responsible for adoption of the ISO 9000 series as U.S. national standards.

The Chief of NIST/SSD serves as the Chair of the ANSI-Registrar Accreditation Board (RAB) National Accreditation Program (NAP) Environmental Management Systems (EMS) Council. The Council is responsible for accrediting registrars that assess facilities for conformance to the ISO 14001 standard.

NIST/SSD has published a number of directories and reports on conformity assessment-related issues and maintains a Web site (<http://www.ts.nist.gov/ca>) that provides a one-stop-shopping source for information on various conformity assessment issues.

#### National Cooperation for Laboratory Accreditation (NACLA)

Section 12b of the National Technology Transfer and Advancement Act (NTTAA) of 1995 directed NIST to coordinate conformity assessment activities of federal, state, and

local entities to eliminate any unnecessary duplication of conformity assessment activities. In response, NIST has been a driving force behind the creation of NACLA. NACLA is composed of organizations in the United States, with observers from Mexico and Canada that actively support development of a system for recognizing the competence of testing and calibration laboratories leading to worldwide acceptance of test and calibration reports from those laboratories. Concerned with costly, multiple, duplicate assessments, and the lack of domestic or international recognition of laboratory accreditations, the group has explored solutions that could lead the United States, and perhaps eventually its North American Free Trade Agreement (NAFTA) partners, toward the goal of having only one assessment of a laboratory in a given field of testing, based on internationally accepted procedures. The NACLA vision is for a U.S. laboratory accreditation system that achieves the following goals:

- For the testing laboratory, a single accreditation in a given field of testing, with worldwide recognition of the laboratory's competence.
- For the manufacturer/supplier, a test performed once, with worldwide acceptance.
- For the acceptance body (that is a government agency or an industry specifier); an accreditation based on uniform criteria and intended to ensure that a laboratory is qualified to provide data of consistent quality.

In the past year, NACLA continued to improve its program and to take appropriate actions to align with the evolving international system for recognition of competent accreditation bodies. Some milestones during the period include the following:

- Adoption of a new version (Revision D) of the NACLA Recognition Procedure. The revision incorporates several procedural improvements that have been developed by the International Laboratory Accreditation Cooperation (ILAC).
- A meeting of NACLA officials with officials of the Asia Pacific Laboratory Accreditation Cooperation (APLAC) to discuss ways that the two organizations might cooperate, to the benefit of both.
- Recognition of an additional U.S. accreditation body: the American Industrial Hygiene Association (AIHA). There are now four accreditation bodies recognized by NACLA.
- Sponsorship of the first National Forum on Laboratory Accreditation. The event was well attended and well received. The second annual Forum is scheduled for March 2003.

The Standards Services Division Chief is a member of the NACLA Operations Council and chairs the NACLA International Affairs Committee. Under the NIST-NACLA Memorandum of Understanding, signed July 2000, NIST recognizes NACLA as a suitable private sector alternative to NIST's National Voluntary Conformity Assessment System Evaluation (NVCASE) program. NIST relies on NACLA recognition of qualified accreditation bodies in support of NIST responsibilities as a designating authority under the U.S.-European Union Mutual Recognition Agreement (MRA), the

APEC Telecommunications MRA, and the CITEL MRA. More than 100 laboratories have been designated as Conformity Assessment Bodies (CABs) under the provisions of the U.S.-EU and APEC MRAs, pursuant to this MOU.

National Voluntary Laboratory Accreditation Program – NIST/SSD’s National Voluntary Laboratory Accreditation Program (NVLAP) operates in conformance with ISO Guide 58 and accredits calibration and testing laboratories to ISO/IEC 17025. NVLAP operates programs in support of several federal agencies, including the Department of Energy, the Nuclear Regulatory Commission, the Food and Drug Administration, the Department of Defense, the Environmental Protection Agency, the Federal Communications Commission, and in support of state and local governments.

National Information Assurance Partnership (NIAP) – NIST and the National Security Agency have established a program under the National Information Assurance Partnership (NIAP) to evaluate IT product conformance to international standards. The program, officially known as the NIAP Common Criteria Evaluation and Validation Scheme for IT Security or Common Criteria Scheme in abbreviated form, is a partnership between the public and private sectors. NAIP assessment programs are based on national and international IT security standards and criteria. The initial assessment programs will focus on the testing and evaluation of commercial IT products; follow-on programs will address the assessment of IT systems and networks to support the system certification and accreditation processes. Present IT product testing programs include the NIAP Common Criteria Evaluation and Validation Program (see more at <http://niap.nist.gov/cc-scheme/>) and the NIST Cryptographic Module Validation Program (see <http://csrc.nist.gov/cryptval/>).

9. Provide Any Examples or Case Studies of Standards Successes:

U.S. Smart Card Interoperability Specifications

The federal government is expanding smart card use among federal employees because of the security features and inherent versatility of smart cards. For example, a single smart card could be used as an identification card, to provide access to secure buildings, to securely logon to computer systems, and to make small purchases. However, the federal government has been reluctant to use smart cards on a large scale primarily due to the lack of interoperability among smart card products.

Scientists in NIST ITL’s Computer Security Division have been working with the General Services Administration, other federal agencies, and industry partners for the past several years to establish a Government Smart Card (GSC) program to facilitate widespread deployment of interoperable smart card systems. Specifically, ITL set out to build a framework for smart card interoperability, enabling broad adoption of this critical technology by the public and private sectors. The mechanism and technical foundation for this framework is the Government Smart Card Interoperability Specification (GSC-IS). The GSC-IS version 2.0 was published on June 27, 2002, as NISTIR 6887. (See more at <http://smartcard.nist.gov/>)

The GSC-IS lays the groundwork for smart cards to work in an open environment. It defines an architectural model for interoperable smart card service provider modules, compatible with both file system cards and virtual machine cards, which allows smart card application developers to obtain various services (e.g., encryption, authentication, digital signatures, etc.) from GSC-compliant smart cards through a common, interoperable smart card services interface.

#### First IEEE Wireless Personal Area Network (802.15) Standard

ITL contributed significantly to a new standard for wireless personal area networks (WPANS) approved by the Institute of Electrical and Electronics Engineers (IEEE) on March 21, 2002 (<http://standards.ieee.org/announcements/802151app.html>). The approval of IEEE 802.15.1 was the long-awaited formal acceptance of the Bluetooth Special Interest Group (SIG) Core Specification by a recognized standards body. Although the Bluetooth Core Specification defines all the layers from physical layer to the application layer, only the lower layers, which are considered within the scope of the IEEE 802 Medium Access Control and Physical layers, are included. This wireless technology operates in the 2.4 GHz frequency band and provides voice communications at 64 bit/s and data transfers up to 732 kbit/s at distances up to ten meters. The technology is meant to be inexpensive, thus positioning itself for system integration as one of the pervasive computing technologies.

#### Interactive Digital Television Standard

The Advanced Television System Committee (ATSC), an international industry consortium of more than 200 members consisting of broadcasters, content creators, software vendors, and equipment manufacturers, announced at its October 2001 meeting that the DTV Application Software Environment (DASE) standard was approved. DASE is the North America middleware standard for broadcast interactive television. NIST and the DASE specialist group are developing these standards in advance of widespread use of digital television technology. The NIST open reference implementation of the DASE standard provides application developers and consumer electronic manufacturers an application development environment and a basis for an interoperable Digital TV receiver implementation.

The NIST implementation was a deciding factor in the final approval of the DASE standards documentation. Because of the complexity and size of this forward-looking standard, industry participants requested that ATSC demonstrate that DASE could, in fact, be implemented. The ATSC membership voted, by a clear majority, that this requirement was satisfied by the NIST Procedural (Java) Application Environment implementation and the Samsung Declarative Application Environment implementation.

The interactive digital television community has been very responsive to the NIST prototype implementation. Over 800 copies of the software have been downloaded since its release, announced in June at the 2001 DASE Symposium held at NIST. The NIST implementation is an enormous undertaking, consisting of over 100,000 lines of Java™

code. The NIST environment provides not only the DASE implementation, but also an ATSC DTV receiver simulation and DASE reference applications. This is a major accomplishment for the digital TV industry, as all analog transmission is mandated by the FCC to be digital in 2007.

10. Comments.

The Department of Commerce encourages its staff to participate in standards committee activities relating to the mission of the Department, subject to resource availability. Agency employees participate in the standards development activities of U.S. private sector standardization bodies; local, state, and federal governments; and both private and governmental (treaty and non-treaty) international standardization organizations. Standards of interest to the Department cover a broad range of technical areas including: (1) energy conservation, (2) information and computer technology, (3) telecommunications, (4) environmental safety and health, (5) meteorological work, and (6) a variety of other product sectors and fields of technology.

The Standards Committee Participation (SCP) Database maintained by NIST collects and disseminates information on DOC staff participation in standards development activities. NIST publishes an annual directory containing statistics on all DOC standards committee participation as well as alphabetical listings of staff participants and standards organizations and committees.

Four hundred thirty-nine DOC staff participated in the standards writing activities of 170 (112 national and 58 international) standards developing organizations. Because of the volume of NIST participants relative to the remaining DOC agencies, the DOC standards participant information contained in the SCP Database is divided into two parts -- NIST and other (non-NIST) DOC agencies. Therefore, the data presented below is separated accordingly.

## NIST Participation

NIST had 387 participants in the activities of 139 standards organizations. NIST participated on 451 committees and held 1,270 memberships on these committees. Ten of the standards organizations in which NIST staff members participated had 20 or more NIST memberships.

Listed below are 12 standards organizations and the American National Standards Institute (ANSI) in which NIST holds at least 20 committee memberships. These organizations/agencies accounted for 74 percent (965) of the 1,302 NIST committee memberships:

<u>Organizations with NIST Members</u>	<u>Committee Memberships</u>
American Society for Testing and Materials	530
American National Standards Institute	101
International Organization for Standardization	65
Institute of Electrical and Electronic Engineers	45
American Society of Mechanical Engineers	43
International Electrotechnical Commission	39
CIE (International Commission on Illumination)	30
American Concrete Institute	23
International Organization of Legal Metrology	23
Telecommunications Industry Association	23
Telecommunications Industries of America	23
CGPM (Conférence Générale des Poids et Mesures)	20
NCITS (National Committee for Information Technology Standards)	20
Total	965

## Other Department of Commerce Participation

Fifty-two staff members of other DOC agencies participated in 51 committees of 26 standards organizations. They held 94 memberships on those committees. Nine of those standards organizations had five or more other DOC participants.

The following organizations/agencies accounted for the 94 committee memberships held by DOC agencies other than NIST:

<b>Organization</b>	<b># of Memberships</b>	<b>Percentage</b>
ANSI	11	11.7%
INCITS	8	8.5%
ISO	8	8.5%
FCMSSR	7	7.4%
DOD/FAA/DOC	6	6.4%
ITU-R	6	6.4%
TIA	6	6.4%
DOS	5	5.3%
IEEE	5	5.3%
IHO	4	4.3%
ICA	3	3.2%
ITU-T	3	3.2%
SAE	3	3.2%
WMO	3	3.2%
ASTM	2	2.1%
ICAO	2	2.1%
USGS	2	2.1%
WIPO	2	2.1%
ACSM	1	1.1%
ATA	1	1.1%
DOD	1	1.1%
DOI	1	1.1%
NATO	1	1.1%
NCS	1	1.1%
NOAA	1	1.1%
RTCA	1	1.1%
Total	94	100%



## DOC AGENCIES (EXCLUDING NIST): SUMMARY OF STANDARDS-RELATED ACTIVITIES

International Trade Administration (ITA) – The ITA participates in four CODEX committees, one ICAO committee and one committee of the U.S.-Russia Working Group Standards for Chemicals. This year, ITA’s work in standards furthered toy safety standardization and international civil aviation standards adoption and acceptance worldwide.

National Oceanic and Atmospheric Administration (NOAA) – Standardization of data acquisition and data management practices are vital to the mission at NOAA. NOAA seeks to establish voluntary standards with selected industrial associations, academia, and national organizations of state and local governments (e.g., the American Association of State Climatologists), as well as through participation in professional societies (e.g., American Meteorological Society). All NOAA line organizations participate in standards development activities. In general, standards used in many NOAA activities are established in conjunction with other federal agencies (e.g., DOD, Federal Aviation Administration, U.S. Department of Agriculture, and the Federal Geographic Data Committee) either through joint participation in international organizations such as the World Meteorological Organization, or by means of bilateral and multilateral agreements with other nations. These standardization activities apply to all phases of environmental data acquisition, processing, and distribution.

National Telecommunications and Information Administration (NTIA) – The NTIA contributes to the development and application of national and international telecommunication standards by participating and holding leadership roles in various voluntary standards committees at the national and international levels (e.g., Telecommunications Industry Association, International Telecommunication Union). These standards enhance the quality and reliability of the domestic telecommunications infrastructure, promote healthy competition in telecommunications products and services, and expand international trade opportunities for U.S. telecommunications firms.

United States Patent and Trademark Office (USPTO) – The USPTO participates and contributes to the resolution of identified requirements for international standards, primarily through the Standing Committee on Information Technologies of the World Intellectual Property Organization. USPTO staff also participates in standardization activities of the International Patent Classification Union and the ANSI-Accredited Committee on Patent Standards.

Bureau of the Census – DOC’s Bureau of the Census is active in the development of standards and specifications for: (1) the capture and storage of geographic information in computer-readable formats along with metadata documenting the characteristics of those data; and (2) the definitions of statistical, economic, and geographic terms. The Census Bureau participated in the following groups in FY 2000: Federal Geographic Data

Committee -- various subcommittees and working groups; ANSI/NCITS-L1 Geographic Information Systems; ISO Technical Committee 211; Ad hoc Baseline Committee on the U.S. International Boundary; U.S.G.S. Spatial Data Transfer Standards (SDTS) Technical Review Board; International Cartographic Association, Commission on National and Regional Atlases; U.S.G.S. National Atlas of the United States Steering Committee; and the Open GIS Consortium (OGC).

National Center for Standards and Certification Information (NCSCI) – NCSCI is the U.S. focal point for standards-related information at home and abroad; it provides information on U.S., foreign, regional, and international voluntary standards bodies; mandatory government regulations; and conformity assessment procedures for nonagricultural products. NCSCI maintains an extensive collection of reference materials, including U.S. military and other federal government specifications, U.S. industry and national standards, international standards, and selected foreign national standards. Staff members respond to requests for specialized standards information, provide contact points for translations of foreign standards and regulations, and disseminate information to U.S. industry concerning proposed foreign regulations and general standards issues.

In direct response to U.S. obligations resulting from the World Trade Organization (WTO) Agreement on Technical Barriers to Trade (TBT Agreement) and NAFTA, NCSCI serves as the U.S. national inquiry point responsible for responding to questions concerning U.S. standards, technical regulations and conformity assessment procedures. NCSCI also serves as the U.S. member of the International Organization for Standardization (ISO) Information Network (ISONET). NCSCI, with other national WTO and NAFTA inquiry points and ISONET members, is part of a network that regularly exchanges standards-related information and has access to foreign trade-related technical standards, regulations, and conformity assessment procedures.

Signatories to the WTO TBT Agreement are required to notify the WTO Secretariat in Geneva of proposed technical regulations that could affect trade and provide a recommended 60-day comment period to allow other WTO Members to review and comment on the proposals. NCSCI staff receive copies of the one-page notifications and disseminate them at no charge through a Web-based subscription service called *Export Alert!* NCSCI also acquires the full text of the proposed technical regulations from the relevant foreign inquiry point. NCSCI staff is also responsible for notifying the WTO Secretariat of proposed U.S. technical regulations that may affect trade.

Federal Information Processing Standards (FIPS) – FY2002 – Under the Information Technology Management Reform Act (Public Law [P.L.] 104-106), the Secretary of Commerce approves standards and guidelines that are developed by NIST for federal computer systems. Under Section 513 of the Information Technology Management Reform Act of 1996, the Computer Security Act of 1987, P.L. 104-106, and the Federal Information Security Management Act (FISMA), NIST develops standards, guidelines, and associated methods and techniques for federal computer systems. This includes

standards and guidelines needed to ensure the cost-effective security and privacy of sensitive information in federal computer systems, when there are compelling federal requirements and there are no existing voluntary industry standards. These standards and guidelines are issued by NIST as FIPS for use government-wide. FIPS address federal requirements for the interoperability of different systems, for the portability of data and software, and for computer security. When FIPS are considered necessary, NIST announces proposed FIPS in the *Federal Register* for public review and comment.

During FY 2002, NIST made the following FIPS announcements:

- December 2001 – NIST announced the Secretarial approval of FIPS 197, Advanced Encryption Standard (AES). The AES provides a sound technical specification for encrypting and decrypting data. It is to replace FIPS 46-3, Data Encryption Standard, which has been in use for more than 20 years.
- March 2002 – NIST announced the Secretarial approval of FIPS 198, Keyed-Hash Message Authentication Code (HMAC). The HMAC is an essential component of a comprehensive group of cryptographic techniques that federal agencies need to protect data, communications, and operations.
- August 2002 – NIST announced the Secretarial approval of FIPS 180-2, Secure Hash Standard (SHS), a revision of FIPS 180-1. The SHS was revised to address advances in technology since FIPS 180-1 was issued in 1992 to provide federal agencies and departments with an updated technical standard for use with FIPS 197, Advanced Encryption Standard.
- August 2002 – NIST announced the Secretarial approval of changes to FIPS 186-2, Digital Signature Standard (DSS). The purpose of this change was to expand the DSS by specifying two voluntary industry standards for generating and verifying digital standards.

## Department of Defense

1. Number of government-unique standards used in lieu of voluntary standards.

The Department of Defense reports voluntary consensus standards usage on a categorical basis; therefore, this information is not available.

2. Number of voluntary consensus standards substituted for government-unique standards.

64

Voluntary Standard	Government–Unique Standard
SAE-AS35411	MIL-F-35411
SAE-AMS6322	MIL-S-6049
SAE-AMS6325	MIL-S-6049
SAE-AMS6470	MIL-S-6709
SAE-AMS6472	MIL-S-6709
SAE-AS7413	MIL-C-7413
SAE-AMS6444	MIL-S-7402
SAE-AMS6447	MIL-S-7402
SAE-J24714	MIL-C-24714
NASM45595	MIL-W-45595
SAE-AMS-R-83285	MIL-R-83285
SAE-AMS-R-8412	MIL-R-8412
SAE-AMS-R-83845	MIL-R-83845
SAE-AMS5511	MIL-S-4043
NASM4751	MIL-C-4751
NAS838	MIL-C-5501
NAS842	MIL-C-5501
ASTM438	MIL-B-5687
ASTM439	MIL-B-5687
SAE-AMS5542	MIL-N-7786
NAS9307	MIL-DTL-7885
NAS9308	MIL-R-7885
NAS9310	MIL-DTL-7885
NAS9311	MIL-DTL-7885
NAS9312	MIL-DTL-7885
SAE-AMS5121	MIL-S-7947
SAE-AMS5046	MIL-S-7952
SAE-AMS1424	MIL-A-8243
SAE-AS13572	MIL-S-13572
NEMA-HP3	MIL-W-16878
NASM25049	MIL-K-25049
SAE-AS85421	MIL-F-85421

SAE-AS85421/1	MIL-F-85421/1
SAE-AS85421/2	MIL-F-85421/2
SAE-AS85421/3	MIL-F-85421/3
SAE-AS85421/4	MIL-F-85421/4
SAE-AS85421/5	MIL-F-85421/5
SAE-AS85421/6	MIL-F-85421/6
SAE-AS85421/7	MIL-F-85421/7
SAE-AS85421/8	MIL-F-85421/8
SAE-AS85421/9	MIL-F-85421/9
SAE-AS85421/10	MIL-F-85421/10
SAE-AS85421/11	MIL-F-85421/11
SAE-AS85421/12	MIL-F-85421/12
SAE-AS85421/13	MIL-F-85421/13
SAE-AS85421/14	MIL-F-85421/14
SAE-AS85421/15	MIL-F-85421/15
SAE-AS85421/16	MIL-F-85421/16
SAE-AS85421/17	MIL-F-85421/17
SAE-AS21150	MS21150
SAE-AS21151	MS21151
SAE-AS21152	MS21152
SAE-AS21153	MS21153
NASM21382	MS21382
NASM21383	MS21383
NASM22384	MS21384
NASM21385	MS21385
NASM21386	MS21386
NASM21387	MS21387
PIA-PS22002	MS22002
PIA-PS22003	MS22003
PIA-PS22010	MS22010
PIA-PS22019	MS22019
PIA-PS22020	MS22020
SAE-J20	ZZ-H-428

3. Number of voluntary consensus standards used in FY 2002.

53

During FY 2002 DoD used on a first-time basis (adopted) 53 voluntary consensus standards. The total number of voluntary consensus standards available for use in the DoD document inventory numbers 8914.

4. Number of agency employees participating in voluntary consensus standards activities.

461

5. List by name and acronym of voluntary consensus standards bodies in which DoD participated during the reporting period.

109

Aerospace Industries Association - AIA  
Air Conditioning & Refrigeration Institute - ARI  
Air Movement and Control Association - AMCA  
Alliance for Telecommunications Industry Solutions - ATIS  
Aluminum Association - AA  
American Architectural Manufacturers Association - AAMA  
American Association of Textile Chemists and Colorists - AATCC  
American Bearing Manufacturers Association - ABMA  
American Boat and Yacht Council - ABYC  
American Concrete Institute - ACI  
American Conference of Governmental Industrial Hygienists - ACGIH  
American Dental Association - ADA  
American Gear Manufacturers' Association - AGMA  
American Hardboard Association - AHA  
American Industrial Hygiene Association - AIHA  
American Institute of Aeronautics and Astronautics - AIAA  
American Institute of Steel Construction - AISC  
American Institute of Timber Construction - AITC  
American Leather Chemists Association - ALCA  
American National Metric Council - ANMC  
American National Standards Institute - ANSI  
American Petroleum Institute - API  
American Railway Engineering & Maintenance-of-Way Assoc. - AREMA  
American Society for Nondestructive Testing - ASNT  
American Society For Quality - ASC  
American Society for Testing and Materials - ASTM  
American Society of Cinematographers - ASC  
American Society of Civil Engineers - ASCE  
American Society of Heating, Refrigerating, and Air-Conditioning Engineers - ASHRAE  
American Society of Mechanical Engineers – ASME  
American Society of Sanitary Engineering - ASSE  
American Water Works Association - AWWA  
American Welding Society - AWS  
American Wood Preservers Association - AWPA  
APA-The Engineered Wood Association - APA  
Architectural Woodwork Institute - AWI  
Association for the Advancement of Medical Instrumentation - AAMI  
BOCA International - BOCA  
Builders Hardware Manufacturers Association - BHMA

Canadian General Standards Board - CGSB  
Cast Iron Soil Pipe Institute - CISPI  
Compressed Gas Association - CGA  
Construction Specifications Institute - CSI  
Cooling Technology Institute - CTI  
Cordage Institute - CI  
Data Interchange Standards Association, Inc. - DISA  
Deep Foundations Institute - DFI  
Electronic Components Assemblies & Materials Association - ECAMA  
Electronic Industries Alliance - EIA  
Electrostatic Discharge Association - EDA  
Government Electronics & Information Technology Association - GEITA  
Hardwood Plywood & Veneer Association - HPVA  
High Frequency Industry Association - HFIA  
Human Factors and Ergonomics Society, Inc. - HFES  
IDE Alliance (formerly The Graphic Communications Association) - IDEA  
Illuminating Engineering Society of North America - IESNA  
Information Technology Industry Council - ITIC  
Institute for Interconnecting and Packaging Electronic Circuits - IPEC  
Institute of Clean Air Companies - ICAC  
Institute of Electrical and Electronics Engineers - IEEE  
Institute of Environmental Sciences & Technology - IEST  
Insulated Cable Engineers Association - ICEA  
International Association of Plumbing and Mechanical Officials - IAPMO  
International Committee for Information Technology Standards - ICITS  
International Electrotechnical Commission - IEC  
International Organization For Standardization - IOS  
Internet Engineering Task Force - IETF  
Joint Electron Device Engineering Council - JEDEC  
Magnetic Materials Producers Association - MMPA  
Manufacturers Standardization Society of the Valve and Fittings Industry - MSSVFI  
Master Painters Institute - MPI  
NACE International - NACE  
National Association of Architectural Metal Manufacturers - NAAMM  
National Association of Relay Manufacturers - NARM  
National Electrical Manufacturers Association - NEMA  
National Fire Protection Association - NFPA  
National Fluid Power Association - NFPA  
National Hardwood Lumber Association - NHLA  
National Information Standards Organization - NISO  
National Institute of Building Sciences - NIBS  
National Petroleum Management Association - NPMA  
NSF International - NSF  
Parachute Industry Association - PIA  
Plumbing and Draining Institute - PDI

Plumbing-Heating-Cooling Contractors Association - PHCCA  
 Quarter-Inch Cartridge Drive Standards, Inc. - QICDS  
 Resistance Welders Manufacturers Association - RWMA  
 Rubber Manufacturers Association - RMA  
 SAE International – SAEI  
 Scientific Apparatus Makers Association - SAMA  
 Sheet Metal & Air Conditioning Contractors National Association - SMACC  
 Simulation Interoperability Standards Organization - SISO  
 Society for Protective Coatings - SPC  
 Society of Allied Weight Engineers - SAWE  
 Standards Engineering Society - SAE  
 Steel Door Institute - SDI  
 Steel Founders Society of America - SFSA  
 Steel Window Institute - SWI  
 The Open Group - TOG  
 The Soap and Detergent Association - SDA  
 The Tire and Rim Association, Inc. - TRA  
 TIA - TIA  
 Truck Trailer Manufacturers Association - TTMA  
 UN Centre for Facilitation of Procedures & Practices for Administration, Commerce & Transport - UNCFPPACT  
 Underwriters Laboratories - UL  
 Western Wood Products Association - WWPA  
 Window and Door Manufacturers Association - WDMA  
 Workflow Management Coalition - WMC  
 World Wide Web Consortium – WWWC

6. DoD reports use of voluntary consensus standards in the following manner:
  - a. DoD reports the first-time use of standards during the specified time frame.
  - b. DoD reports the total number of standards available for use.
  - c. DoD reports each edition (slash sheet) of a single standard as a separate document.
  - d. DoD does not report standards used for guidance purposes.
  - e. DoD reports documents developed by all standards organizations (both ANSI accredited and non-accredited).
  
7. The A-119 policy does mandate that government agencies review at least once a year their respective voluntary consensus standards programs. This mandate is an excellent means of determining if agencies are relying on government-unique standards to a greater extent than is necessary. The Department, however, is not certain that all agencies are employing the same criteria to report voluntary consensus standards usage. The Department recommends a committee draft language explaining the term “usage” and forward this language to OMB for inclusion in the next revision of A-119.
  
8. No comment.



9. No comment.

10. No comment.

## Department of Education

1. Number of government-unique standards used in lieu of voluntary consensus standards.  
0
2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.  
0
3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in sections 11 and 12 of the Circular.  
17

Note: The number of standards used has greatly increased from last year because we are now counting the number of consensus standards used to support issuance of section 5(a)(1) (General Duty clause of the OSH Act) violations. In most cases, the consensus standard used is a more current version of a consensus standard that has been incorporated by reference in the OSHA standards or a consensus standard addressing an area not specifically covered by an OSHA standard.

4. The number of agency employees participating in voluntary consensus standards activities during this period.  
2
5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.  
1  
ASC X12 Committee
6. A description of how your agency currently reports its use of voluntary consensus standards.
  - a. No response.
  - b. No response.
  - c. No response.

- d. No response.
  - e. No response.
7. No response.
  8. No comment.
  9. No comment.
  10. Since 1989, the U.S. Department of Education's National Center for Education Statistics (NCES) has been actively working with the American National Standards Institute (ANSI) on developing Electronic Data Interchange (EDI) transaction sets through the Accredited Standards Committee (ASC) X12 committee to electronically convey administrative educational information between educational agencies. This effort is now known as the Standardization of Postsecondary Education Electronic Data Exchange (SPEEDE) and Exchange of Permanent Records Electronically for Students and Schools (ExPRESS) Project. SPEEDE/ExPRESS represents the combined efforts of many organizations focused upon the development of ANSI ASC X12 Electronic Data Interchange Standards for Education. For more information, please visit <http://nces.ed.gov/edi/speedeExp.asp>. The following are ANSI Transaction Sets that are of interest to the Educational Community. Each of the transaction sets described below should be wrapped in electronic envelopes that provide routing, time stamp, and security information. These envelopes consist of the ISA/IEA and GS/GE Control Segments. In addition to the transactions sets listed, Transaction Set 997 - Functional Acknowledgment is an integral part of the EDI process. For more information, please visit <http://nces.ed.gov/edi/tstable.asp> Transaction Sets Relating to Individual Student Records \* TS 130 - Student Educational Record (Transcript) \* TS 131 - Student Educational Record (Transcript) Acknowledgment \* TS 138 - Testing Results Request and Report \* TS 146 - Request for Student Educational Record (Transcript) \* TS 147 - Response to Request for Student Educational Record (Transcript) \* TS 189 - Application for Admission to Educational Institutions \* Implementation Guides are available at <http://nces.ed.gov/edi/IGs.asp> Transaction Sets Relating to Human Resource Data \* TS 132 - Human Resource Information Transaction Sets Relating to Student Financial Aid Records \* TS 135 - Student Loan Application \* TS 139 - Student Loan Guarantee Result \* TS 144 - Student Loan Transfer and Status Verification \* TS 190 - Student Enrollment Verification \* TS 191 - Student Loan Pre-Claims and Claims Transaction Sets Relating to Institutional Records \* TS 133 - Educational Institution Record \* TS 152 - Statistical Government Information used to transmit CCD, IPEDS and Library surveys to NCES \* TS 188 - Educational Course Inventory.

## Department of Energy

Standards Management: The Department of Energy (DOE) implements the federal guidance and requirements of OMB Circular A-119 (OMB A-119) and the statutory requirements of Public Law (PL) 104-113 (15 USC 272) on the use of voluntary consensus standards (VCSs) through specific departmental directives (policies, orders, requirements, guides, and technical standards) and supporting programs and management systems. The Department's Integrated Safety Management System (ISMS - Internet address is <http://tis.eh.doe.gov/ism/>) establishes the overall business processes for DOE and its contractors to incorporate management of DOE's environment, health, and safety matters for workers and the public as an integral part of our technical and business management, using standards as one of its primary tools.

DOE's overall standards activities are managed through a Technical Standards Program (TSP), established under the DOE Standards Executive. (The TSP Internet address is <http://tis.eh.doe.gov/techstds/>). The TSP provides the means for DOE to implement fully the policy and requirements of PL 104-113 and OMB A-119, and establishes a focus from which to promote the use of VCSs across DOE and to support active participation with Standards Development Organizations (SDOs). The TSP also manages the development of DOE internal standards where SDO standards are not available to meet unique DOE technical needs, and cannot be readily developed by an SDO. The TSP has processes for converting DOE Technical Standards to VCSs, including continuing initiatives with ASCE, ANS, and ASTM.

The TSP also charters "Topical Committees" (TCs) that coordinate on standards development activities in specific technical areas across DOE, with other federal agencies, and with national and international SDO counterparts. The TCs are comprised of subject matter experts from across the DOE community, and encompass such diverse areas as laboratory accreditation, metrology, fire protection, environmental management systems, meteorology, biota dose assessment, chemical safety, emergency management, and nuclear safety training. DOE TCs may include observers and participants from other federal agencies, industry, and SDOs.

The DOE Standards Executive actively participates with the Interagency Committee on Standards Policy (ICSP), supported by the DOE TSP. The DOE, the Nuclear Regulatory Commission (NRC), and NIST conduct coordination meetings with key SDOs to review common standards needs and activities, identify issues, and coordinate development efforts. The DOE, NRC, and NIST also cooperated to sponsor and maintain U.S. participation with ISO's TC85 Nuclear Energy committees and working groups (under ASTM administration). DOE representatives also routinely interface with AMSE and ASTM representatives to discuss ongoing standards activities.

The DOE Information Technology (IT) Standards Program, in coordination with the DOE TSP, tracks IT standards development, coordinates with subject matter experts, adopts new or retires outdated standards, and maintains a Profile of Adopted Standards

(primarily international and national standards at [http://cio.doe.gov/ITReform/ArchitectureStandards/repository\\_info.htm](http://cio.doe.gov/ITReform/ArchitectureStandards/repository_info.htm)). DOE's Office of Energy Efficiency and Renewable Energy, Codes and Standards Program (Internet address is [http://www.eren.doe.gov/buildings/codes\\_standards/aboffmsn.htm](http://www.eren.doe.gov/buildings/codes_standards/aboffmsn.htm)) also conducts a legislatively mandated, multi-year effort to improve the energy efficiency in the Nation's buildings through energy efficiency standards, codes, and guidelines for buildings, building equipment, and appliances. The Department is required to promulgate amended energy efficiency standards designed to achieve the maximum improvement in energy efficiency that the Secretary determines are technically feasible and economically justified. The Department's codes and standards development efforts in these areas are closely coordinated with SDOs and include early involvement of industry and state stakeholders and relevant federal agencies.

Standards Use: DOE "uses" VCSs extensively in managing, operating, and regulating our diverse sites, laboratories, operations, facilities, and activities – over a range that includes nuclear weapons production, energy research, oil storage, hydroelectric power, accelerator operations, nuclear facility decommissioning, and fusion experiments. VCSs are consulted, referenced and applied in our research and development activities; security and safeguards programs; environment, safety and health management; and in mission-related design, procurement, construction, operations, maintenance, emergency operations, and decommissioning efforts.

For DOE reporting purposes, "use" means that a VCS has been cited, referenced, applied, or otherwise incorporated into DOE requirements, operations, and activities for the first time, or in continued use, as noted below. For FY 2002, DOE documented the use of 1,189 different VCSs. The use of a particular VCS by several different organizations or in different versions is reported as a single use by DOE. DOE also uses a number of consortia standards (about 35 – all information technology) that are tracked, but not reported.

The VCSs reported "used" by DOE in the annual review are compiled from several sources that incorporate VCSs that are actually used by DOE and DOE contractors, including: DOE regulations (as an acceptable means to meet specific DOE requirements or as a reference); DOE directives - policy, orders, manuals, guides (as an acceptable means to meet specific DOE requirements or as a reference); DOE contracts (management and operations, management and integration - as a committed means to carry out contracted DOE missions and functions); and DOE safety basis documents (stated as a commitment or applied reference in DOE safety analysis reports, standards/requirements identification documents, and "work smart" standards sets).

Other extensive uses of VCSs at DOE that are not documented and reported include: procedures writing; establishing safety criteria (e.g., for fire protection, nuclear criticality safety, nuclear facility safety); as supporting references or cites in internal DOE Technical Standards; and personal or contractor uses and participations that are not on behalf of DOE.

Very few VCSs (none for this reporting period) are mandated through DOE rules, regulations, or DOE directives. However, DOE is an agent in the development and update of certain legislatively mandated building and appliance energy efficiency codes and standards. DOE more typically will cite specific VCSs as “acceptable means” for implementing requirements, and allow the use of equivalent alternatives. Very few, if any, VCSs are cited in DOE procurements (outside of prime contracts), since most procurements are “off-the-shelf.”

Summary: In accordance with the reporting requirements iterated in OMB A-119, the following information has been developed for the OMB Annual Report and has been submitted to NIST to (1) report the use of voluntary consensus standards within DOE, and (2) report participation in standards development activities on behalf of DOE (by DOE staff and DOE contractor staff on behalf of DOE).

DOE did not mandate the use of any government-unique standards in lieu of suitable voluntary consensus standards during FY 2002. DOE identified no additional voluntary consensus standards that have been substituted for government-unique standards.

DOE participated in 57 VCS standards bodies. There were 681 agency employees participating in VCS activities. (These individuals were involved in 1,268 activities due to multiple participations.) DOE used 1,189 VCSs during FY 2002 – (six new ones added), and we are also reporting for the first time 158 legislatively mandated standards found in DOE regulations and developed through the DOE Office of Energy Efficiency. The DOE Information Technology Program also uses around 35 consortia standards (outside of our definition of a VCS) that we do not report. The attached Summary provides the results and comparisons to the previous year, with appropriate explanatory notes, and demonstrates how DOE fully meets the policies and requirements of P.L. 104-113 and OMB A-119.

1. As required by P.L. 104-113, you must highlight all instances where the agency used government-unique standards in lieu of voluntary consensus standards during FY 2002. For each instance, you must identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Equally as important, you must clearly state your agency’s rationale for such use.

Number of DOE standards mandated in lieu of VCSs (FY 2002)

0

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

Number of VCSs substituted for DOE unique standards (FY 2002)

0

3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in Sections 11 and 12 of the Circular.

1,189

The overall count increased over FY 2001. Six new VCSs were identified as “used” from our annual review. We included an additional 158 VCSs listed in CFRs (derived from an analysis by NIST) that are primarily legislatively mandated energy efficiency standards for buildings and appliances developed through DOE. There are 35 about consortia standards used (but not included in the count), primarily by the DOE IT Standards Program.

4. The number of agency employees participating in voluntary consensus standards activities during this period.

681

The number of individuals participating with SDOs on behalf of DOE increased by 18 this past year. This may be related to increased interest in SDO participation generated by DOE Topical Committees, and by a more active DOE role with ISO/TC85.

Additional Information: Number of VCS development/management participations by DOE and DOE contractor personnel:

1,268

The number of participations decreased by 85 this past year. With the stringent limits on travel budgets and reduced staffing, DOE staff are prioritizing their participation on committees and working groups, maintaining participation only where the interest and need are highest.

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

57

Organization Acronym	Organization Name
ACI	American Concrete Institute
AGS	American Glovebox Society
AIAA	American Institute of Aeronautics and Astronautics
AIHA	American Industrial Hygiene Association
AIIM	Association for Information and Image Management
AISC	American Institute of Steel Construction
ANS	American Nuclear Society
ANSI	American National Standards Institute
ASA	Acoustical Society of America
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating And Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASNT	The American Society for Nondestructive Testing
ASQ	American Society for Quality
ASSE	American Society of Safety Engineers
ASTM	American Society for Testing and Materials (now ASTM International)
AWEA	American Wind Energy Association
AWS	American Welding Society
AWWA	American Water Works Association
CAM-I	Consortium for Advanced Manufacturing – International
CIRMS	Council on Ionizing Radiation Measurements and Standards
CSI	Construction Specifications Institute
CTI	Cooling Tower Institute
EIA	Electronic Industries Alliance
HFS	Human Factors Society (now Human Factors and Ergonomics Society)
HPS	Health Physics Society
IAEA	International Atomic Energy Agency
ICBO	International Conference of Building Officials
ICRP	International Commission on Radiological Protection
IEA	International Energy Agency
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IIE	Institute of Industrial Engineers
INMM	Institute of Nuclear Materials Management
IPC	The Institute for Interconnecting and Packaging Electronic Circuits (IPC)
ISA	The Instrumentation, Systems, and Automation Society



ISO	International Organization for Standardization
ITI	Information Technology Industry Council
NACE	National Association of Corrosion Engineers
NACLA	National Council of Laboratory Accreditation
NBBPVI	The National Board of Boiler & Pressure Vessel Inspectors
NCRP	National Council on Radiation Protection and Measurements
NCSL	National Conference of Standards Laboratories
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NIRMA	Nuclear Information and Records Management Association Inc.
NSC	National Safety Council
NSF	NSF International
PMI	Project Management Institute
RIA	Robotics Industry Association
SAE	Society of Automotive Engineers
SES	Standards Engineering Society
SFPE	Society of Fire Protection Engineers
SIA	Security Industry Association
SPRI	Single Ply Roofing Institute
UL	Underwriters Laboratories
WRC	Welding Research Council

6. A description of how your agency currently reports its use of voluntary consensus standards. Specifically, you should be prepared to answer the following questions: (Note: Questions will be structured on the Web entry database to accept either “Yes/No” or multiple-choice responses.)
- a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards, or (3) both first time and continued uses of standards?  
  
DOE reports both initial and continued uses of standards.
  - b. Does your agency report (1) the total number of standards it uses or (2) each instance where the agency uses (i.e., references) a standard?  
  
DOE reports the total number of standards in use.
  - c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?  
  
Multiple uses and multiple versions count only as a single standard “use.”
  - d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?

Yes, DOE reports use for both guidance and compliance.

- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

No - Consortia and other standards uses are documented and tracked, but not reported.

7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

DOE finds the current version of OMB A-119 adequate and has no recommendations for revision. Issues of clarification and documentation are readily handled through ICSP coordination with OMB.

8. Any conformity assessment activities in which your agency has been involved in the reporting period as described in the *Federal Register*, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities

No Report – this is essentially unchanged from the previous year.

9. No response.

10. No response.

**Department of Health and Human Services**

- As required by P.L. 104-113, you must highlight all instances where the agency used government-unique standards in lieu of voluntary consensus standards during FY 2002. For each instance, you must identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Equally as important, you must clearly state your agency's rationale for such use.

5

Government Standards	Voluntary Standards	Explanation
National Standard Format	ANSI X12 837	The NSF is used widely across the health care payment industry and has become a defacto national standard. However, the Centers for Medicare and Medicaid Services (CMS) have directed their contractors to discontinue use of the NSF standard and replace it with ANSI X12 837 by the beginning of FY 2003.
FR Notice dated June 17, 1994, tentative Final Monograph for Heath Care Antiseptic Drug Products; proposed Rule	ASTM Standard E1115: Test Method for Determining Surgical Hand Scrub Formulations	Sensitivity and bias of the ASTM standard has not been established.
FR Notice dated June 17, 1994, tentative Final Monograph for Heath Care Antiseptic Drug Products; proposed Rule	ASTM Standard E1173-93 Test Method for Evaluation of Pre-Operative Skin Preparation	Sensitivity and bias of the ASTM standard has not been established.
FR Notice dated June 17, 1994, tentative Final Monograph for Heath Care Antiseptic Drug Products; proposed Rule	ASTM Standard E1174-00 Test Method for the Evaluation of the Effectiveness of Health Care Personnel or Consumer Hand Wash Formulations	Sensitivity and bias of the ASTM standard has not been established.

FDA guidelines on aseptic processing published in 1987.

ISO Standard 13408-1  
Defining general requirements for aseptic processing of health care products.

The ability of these ISO requirements is limited to only portions of aseptically manufactured biologics and does not include filtration, freeze-drying, sterilization in place, cleaning in place, or barrier-isolator technology. There are also significant issues related to aseptically produced bulk drug substance that are not included in the document.

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

1

Voluntary Standard

Government Standard

ISO 17025

Varieties of FDA Laboratory Standards

3. The number of voluntary consensus standards that your agency used during FY 2002, based upon procedures set forth in Sections 11 and 12 of the Circular.

616

4. The number of agency employees participating in voluntary consensus standards activities during this period.

515

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

The following list of voluntary consensus standards bodies in which there is agency participation is based upon:

The ANSI accredited standards developers list, and  
The National Resource for Global Standards (NSSN) list.  
3A-Sanitary Standards Committee (3-A)  
Acoustical Society of America (ASA)  
American Association of Blood Banks (AABB)

American Conference of Governmental Industrial Hygienists (ACGIH)  
American Dental Association (ADA)  
American Industrial Hygiene Association (AIHA)  
American National Standards Institute (ANSI)  
American Oil Chemist Society (AOCS)  
American Public Health Association (APHA)  
American Society for Testing Materials (ASTM)  
American Society of Agricultural Engineers (ASAE)  
American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)  
American Society of Mechanical Engineers (ASME)  
American Society of Sanitary Engineering (ASSE)  
ASC X12 Data Interchange Standards Association  
Association for the Advancement of Medical Instrumentation (AAMI)  
Association of Official Analytical Chemists (AOAC)  
Codex Alimentarius  
College of American Pathologists (CAP)  
Commercial Refrigerator Manufacturers Association (CRMA)  
Health Level Seven (HL7)  
Health Physics Society (HPS)  
Industrial Safety and Equipment Association (ISEA)  
Institute of Electrical and Electronics Engineers (IEEE)  
International Electrotechnical Commission (IEC)  
International Organization for Standardization (ISO)  
International Society for Measurement & Control (ISA)  
Lead Industries Association, Inc. (LIA)  
National Association of Photographic Manufacturers (NAPM)  
National Committee for Clinical Laboratory Standards (NCCLS)  
National Council for Prescription Drug Program (NCPDP)  
National Electrical Manufacturers Association (NEMA)  
National Fire Protection Agency (NFPA)  
National Fire Protection Association (NFPA)  
National Institute of Standards and Technology (NIST)  
National Sanitation Foundation (NSF)  
Organization of Economic Cooperation and Development (OECD)  
RESNA (RESNA)  
Society of Automotive Engineers (SAE)  
Underwriters Laboratory (UL)

6. Description of how your agency currently reports its use of voluntary consensus standards. Specifically, you should be prepared to answer the following questions: (Note: Questions will be structured on the web entry database to accept either “Yes/No” or multiple-choice responses.)
  - a. Does your federal agency report (a) only the first-time use of standards, (b) continued uses of standards or (c) both first time and continued uses of standards?

Both first time and continued uses.

- b. Does your agency report (a) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?

The total number of standards used.

- c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?

Yes, multiple editions.

- d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?

Yes.

- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Yes.

7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

### **U.S. Food and Drug Administration**

The policy and recommendations contained in Circular A-119 are consistent with FDA's framework for standards management as announced in the *Federal Register* on October 11, 1995, and enhanced by the Food and Drug Administration Modernization Act (FDAMA). Resource constraints oblige the agency to focus attention on the highest priority activities and to strive to make its participation in those activities very effective. FDA participates in 601 standards development activities within 29 voluntary consensus standards bodies.

For FDA, voluntary consensus standards are most relevant for medical devices, where they are used extensively in the agency's regulatory work, and where the majority of the agency's standards activities are centered. Voluntary consensus standards are less relevant in the areas of human and veterinary pharmaceuticals, biological products and food, where such standards are generally not available nor being developed, and where standards of other national or international organizations such as the U.S. Pharmacopeia (USP), the World Health Organization (WHO), the Food and Agriculture Organization (FAO), the Organization for Economic Cooperation and Development (OECD), and the

International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) predominate.

The central purpose for FDA involvement in the development and use of standards is to assist the agency in fulfilling its domestic public health and regulatory missions. The agency participates widely in the development of standards, both domestic and international, and adopts or uses standards when this action enhances its ability to protect consumers and increases the effectiveness or efficiency of its regulatory efforts. Further, using standards, especially international ones, is a means to facilitate the harmonization of FDA regulatory requirements with those of foreign governments, and thus to improve domestic and global public health protection. Therefore, FDA encourages participation in the development of standards as a useful adjunct to regulatory controls.

The FDA has been involved in standards activities for more than 20 years. In January 1977, the agency promulgated a final regulation now found at 21 CFR 10.95 covering participation by FDA employees in standards development activities outside the agency. This regulation encourages FDA participation in standards activities that are in the public interest, and specifies the circumstances under which FDA employees can participate in various types of standards bodies. The agency built upon that rule with a final policy statement published in the *Federal Register* on October 11, 1995, entitled International Harmonization; Policy on Standards. It provides the agency's overall policy on development and use of standards for all product areas regulated by the agency.

### **Center for Devices and Radiological Health (CDRH)**

The Food and Drug Administration Modernization Act of 1997 (FDAMA) allows the agency to recognize voluntary consensus standards established by international and national standards development organizations that may be used to satisfy identified portions of device pre-market review submissions or other requirements. CDRH has made available a standards relevant document on their web site. The document, "CDRH Standard Operating Procedures for the Identification and Evaluation of Candidate Consensus Standards for Recognition," establishes internal CDRH procedures for the identification and evaluation of consensus standards for recognition through publication of a notice in the *Federal Register*.

CDRH continues to maintain a database to track the standards activities of its employees, has established, and uses searchable ROM databases of voluntary consensus standards to facilitate reference to current voluntary consensus standards by agency reviewers.

CDRH continues to participate in Steering Committee and Study Group Activities of the Global Harmonization Task Force (GHTF), an intergovernmental consortium to foster medical device regulatory harmonization. During FY 2002, FDA published draft guidance on a pilot program that will be used to evaluate the feasibility of using the Summary Technical Document (STED) and an Essential Principles Document instead of standard CDRH procedures for certain premarket submissions.

Finally, the GHTF has a Memorandum of Understanding with TC 210, the ISO Committee responsible for many aspects of device standards.

**Center for Drugs Evaluation and Research (CDER)/Center for Biologics Evaluation and Research (CBER)**

Voluntary consensus standards are less applicable to pharmaceutical and biological products. CDER and CBER therefore have limited involvement in such activities, but do participate on relevant committees of a number of voluntary consensus standards bodies.

CDER's and CBER's major involvement in standards setting activities is with USP, ICH, OECD, and WHO. Numerous employees are involved in the standards development activities of the USP, a private, voluntary, not-for-profit national standards setting body of health care professionals, recognized authorities in medicine, pharmacy, and allied sciences. USP publishes and revises the United States Pharmacopeia and the National Formulary (NF), the legally recognized compendia of drug standards in the United States.

Both CDER and the CBER participate in the ICH. This ongoing project, begun in 1989, has been undertaken by government agencies responsible for regulation of pharmaceuticals and by industry trade organizations. The European Union, Japan, and the United States bring together regulatory authorities and experts from the pharmaceutical industry in the three regions to discuss scientific and technical aspects of new product registration. The work products, created in working groups of experts from the regulatory agencies and industry, consist of a series of consensus guideline documents to harmonize pharmaceutical testing guidelines. During FY 2002, FDA worked on the implementation of the harmonized Common Technical Document (CTD). This document will become the standard format for marketing application submissions of pharmaceutical products.

FDA officials also participate in a consensus standards development activity sponsored by the Council for International Organizations of Medical Sciences that is aimed at standardizing the safety-related terminology used in adverse experience reporting.

FDA actively participates with the WHO in developing international standards for ensuring the quality of pharmaceutical and biological products, and the OECD on good laboratory practices for animal studies.

Although FDA's work with USP is specifically excluded from reporting under Circular A-119, and ICH, OECD, and WHO do not meet the definition of voluntary consensus standard bodies under the Circular, substantial agency resources are devoted to the development of standards with these organizations. This work is the core part of FDA's overall standards activities for pharmaceutical and biological products.



## **Center for Food Safety and Applied Nutrition (CFSAN)/Center for Veterinary Medicine (CVM)**

The principal international standards activities in the areas of food and veterinary medicine fall under the activities of the Codex Alimentarius Commission of the FAO and the WHO, as well as the Office of International Epizootics (for veterinary medicine). FDA experts from CFSAN, CVM, and other parts of the agency are actively involved in Codex Alimentarius activities, and in activities of methods validation organizations on which Codex Alimentarius relies, such as ISO, the Association of Official Analytical Chemists (AOAC) International, and the International Dairy Federation (IDF). CFSAN has provided the U.S. Delegate or Alternate Delegate to 80 percent (17 out of 21) of the technical committees and task forces and provided technical experts to assist on the work of developing more than 90 Codex standards and guidelines. CVM has also provided numerous technical experts to assist on Codex task forces, especially those related to the Codex Committee on Residues of Veterinary Drugs and Foods (CCRVDF). Currently, the Director of CVM serves as the chair of the CCRVDF.

Voluntary consensus standards have limited relevance to food and veterinary medicine products. However, since the standards activities of multilateral organizations such as the WHO, FAO, the World Trade Organization, and the OECD are important in these areas; CFSAN and CVM are actively engaged in standards and policy development with these organizations. CFSAN is also engaged in standards review in the International Organization for Standardization in Microbiology.

CVM is active in a harmonization initiative similar to the ICH for human pharmaceuticals, that is, developing harmonized requirements for the registration of veterinary pharmaceuticals and biological veterinary medicinal products. It is known as VICH, for Veterinary ICH. Agency employees participate on numerous committees that are drafting VICH guidelines related to veterinary pharmaceuticals. Through VICH, CVM has developed 30 guidelines for the registration of veterinary pharmaceuticals.

### **International/Treaty Standards-Related Activities**

FDA takes part in a variety of international standards activities that fall under treaty organizations, and thus are not reportable under the provisions of Circular A-119. These standards activities are nonetheless important to the agency in fulfilling its public health regulatory mission. Some of these are referred to above, i.e. WHO, FAO, and OECD.

The agency participates in international trade discussions within the WTO, specifically with committees on the Agreement on Technical Barriers to Trade (TBT), and the Agreement on the application of Sanitary and Phytosanitary (SPS) Measures; with the implementation of the counterpart committees of the North American Free Trade Agreement (NAFTA); and with the negotiation of an upcoming trade agreement by 2005, for the Free Trade Area of the Americas where sanitary and phytosanitary measures fall within the scope of the negotiations. In addition, FDA is participating in negotiations

with Chile on a free trade agreement. FDA is engaged in these negotiations to ensure that the agency's requirements are preserved and its regulatory practices can remain focused on fulfilling the agency's mission to protect the public health while being supportive of emerging, broader U.S. government obligations and policies. FDA has participated in several initiatives that are part of the Asia Pacific Economic Cooperation (APEC) forum. FDA topics have included food safety, food labeling, bulk drugs, standards for latex gloves and condoms, and medical device regulation.

8. Any conformity assessment activities in which your agency has been involved in the reporting period as described in the *Federal Register*, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities.

### **U.S. Food and Drug Administration**

The CDRH has liaison with the ANSI Accreditation Committee, the ANSI International Conformity Assessment Committee, ANSI Board Committee on Conformity Assessment, and ASTM Committee E-36 on Conformity Assessment. The Center uses suppliers' declaration of conformity as described in ISO/IEC Guide 22 in its standards recognition program and has developed an MRA with the European Union on mutual recognition of each other's conformity assessment procedures related to manufacture and marketing of medical devices.

CVM inspects drugs manufacturers for compliance with current Good Manufacturing Practices (cGMP) requirements and inspects laboratories that provide pivotal animal studies for drug approvals for compliance with Good Laboratories Practices.

The Office of Regulatory Affairs (ORA) actively participates with the National Cooperation for Laboratory Accreditation (NACLA). An ORA official is a member of the NACLA Executive Board of Directors and has the role of participating in the NACLA Recognition Committee for Accrediting Bodies who apply for mutual recognition. Other FDA officials participate with NACLA in the evaluation of accrediting bodies under ISO/IEC 58 and ISO/IEC 17025 and sit on NACLA technical committees.

ORA officials are also involved with Codex Alimentarius activities, especially in the area of pesticide residues, which relies on methods development by ISO and AOAC. Other activities include participation and the coordination of federal-state conferences to develop uniformity in the reporting of food testing results. The ISO/IEC 17025 standard is the foundation in this coordination effort.

ORA laboratories are finalizing and implementing the new quality system in preparation for accreditation to ISO 17025.

CBER laboratories that conduct official product testing are in the process of becoming ISO 17025 accredited. CBER has conducted initial staff training and is in the process of

writing a Laboratory Quality Assurance Manual centrally documenting Center policies and procedures related to the official testing of regulated biological products. CBER is implementing a quality management software tool to assist in the effort, and has quality insurance managers to coordinate the implementation of an ISO 17025-based quality system.

In addition to the formal reporting obligations under OMB Circular A-119, it should be noted that the overwhelming majority of CBER's standards setting activities with outside organizations are with groups that do not meet all of the requirements of the OMB Circular A-119 definition of a voluntary consensus standards body. CBER interactions with these organizations have resulted in development of several standards that affect a variety of products CBER regulates. These groups include the International Conference on Harmonization (ICH), the Global Harmonisation Task Force (GHTF), the Pan American Health Organization (PAHO), the World Health Organization (WHO), the United States Pharmacopoeia (USP), the International Society for Blood Transfusion (ISTB), and the United States Adopted Names Council (USAN). CBER also collaborates with the National Institute for Biological Sciences and Controls (NIBSC), a United Kingdom Institute, to develop standards and reference materials for biological products. These materials are often presented to WHO for their consideration as international standards.

In addition, CBER has recently initiated activities with a variety of organizations that may result in the development of standards mostly for cellular therapies and tissue products. These organizations include the American Society for Reproductive Medicine (ASRM), the American Association of Tissue Banks (AATB), and the Eye Bank Association of America (EBAA).

CBER has also participated in a collaborative effort with other U.S. governmental and nongovernmental organizations including the National Institute of Standards and Technologies, the National Cancer Institute, and the College of American Pathologists in developing a reference material and guidance to test for the presence of HER2 gene protein. Consistent methodology for detecting HER2/neu gene protein is necessary for treatment of breast cancer with the therapeutic monoclonal antibody, trastuzumab (Herceptin).

CBER also organized an Adenovirus Reference Materials Working Group that developed an adenoviral virus reference material. This material was developed in a unique collaborative effort with donations from multiple organizations and institutions. The reference material is used to define the particle unit and infectious units for adenovirus vectors used in gene therapy.

CBER supports the concept of working within our agency, with other government agencies, the private sector, and other governments to avoid duplication in standards setting activities. Within FDA, they coordinate with other Centers in the development of "Guidance to Industry" documents. FDA also coordinates activities with other agencies,

such as the Environmental Protection Agency, the U.S. Fish and Wildlife Service, the Consumer Product Safety Commission, the Drug Enforcement Agency, and the National Institute of Standards and Technology.

Finally, a majority of standards setting activities are focused on interactions with national and international standards setting bodies such as USP, ICH, OECD, WHO, and the Pan American Health Organization (PAHO). An innovative approach to harmonizing international standards is being undertaken with PAHO. The primary mission of PAHO is to strengthen national and local health systems and improve the health of the peoples of the Americas. In the Americas, there is a need to promote harmonization to facilitate the availability of safe, effective, and good quality pharmaceuticals and thereby protect public health. The regulation of pharmaceuticals and the harmonization of technical standards have emerged as an important component of the economic integration. As a result, a Pan American Network for Drug Regulatory Harmonization (PANDRH) with biennial Pan American conferences was established. The mission of the Network is accomplished by conferences that promote regulatory harmonization for all aspects of quality, safety, and efficacy of pharmaceutical products as a contribution to the quality of life and health care of the citizens of the countries of the Americas.

Harmonization in this context is understood to be the search for common ground within the framework of recognized standards, taking into account the existence of different political, health, and legislative realities among the countries of the region. A steering committee was formed to enable progress between conferences by coordinating, promoting, facilitating, and monitoring harmonization processes in the Americas. A major aspect of PANDRH is to provide training to the regulatory agencies of the Americas. It is felt that training to the same standards will eventually lead to harmonized standards.

### **Centers for Medicare and Medicaid Services (CMS)**

Although CMS was involved in a limited number of conformity assessment activities to assure adherence by their contractors to the national health care payment standards, it is anticipated that these activities will increase significantly in future years. In addition, CMS participated in interagency efforts to harmonize health care standards implementation activities under HIPAA with other federal agencies, including the Department of Defense, the Veterans Administration, and state Medicaid agencies. They also conducted a review of private sector certification services available that could assist in establishing a mechanism to better certify the use of health care standards by contractors. CMS contracted with an IV & V company, Claredi, to conduct certification reviews to evaluate compliance of the Medicare contractor implementation of HIPAA transaction standards in FY 2002. CMS also directed each of their contractors to conduct extensive internal testing of the programming for those implementations.

CMS is also participating with the National Forum for Health Care Quality Measurement and Reporting in the endorsement of standards for performance measures of quality

among various providers. This effort brings together all stakeholders to make a determination founded in a membership-driven consensus process and an evidence base for the subject matter. The various endorsements will occur over the next two years.

### **Agency for Healthcare Research and Quality (AHRQ)**

The Agency for Healthcare Research and Quality (AHRQ) is the government's leading agency in the development and deployment of evidence-based research on health care quality and costs. One key area of this work is AHRQ's support for voluntary consensus standards use in the health care field. As the leading agency sponsoring research on health care quality that will support clinical, health care system, and public policy decision makers, AHRQ regularly is involved in evaluating health care standards across the spectrum of patient care. AHRQ's Evidence-Based Practice Centers (EPCs) is a program of 13 centers across the country and in Canada that are available for public and private partners seeking to research disease conditions and standards of care for those conditions. Numerous EPC reports have been used as crucial inputs of evidence in larger consensus-based standards processes. AHRQ's National Guidelines Clearinghouse is a public resource for evidence-based clinical practice guidelines. NGC is sponsored by AHRQ in partnership with the American Medical Association and the American Association of Health Plans. The NGC is nationally recognized archive for numerous standards, including voluntary consensus standards.

9. Examples or case studies of your agency's standards successes, if you so choose.

### **U.S. FDA/CDRH**

#### **Ignition Test for Medical Oxygen Regulators**

Oxygen regulators are devices used with high-pressure gas cylinders to control the pressure and flow of oxygen to patients. A rare, but serious, risk associated with these devices is flash fires and explosions, which have resulted in dozens of serious injuries and one death. To reduce the prevalence and severity of these types of incidents, FDA, in conjunction with NIOSH, initiated development of an ignition test for medical oxygen regulators. In the spring of 1999, initial research supporting the development of the test was undertaken in partnership with the NASA White Sands Test Facility and a private research firm (Wendell Hull & Associates). These facilities were consulted because they have specialized equipment, test facilities, and fire safety provisions that FDA does not have for performing this type of ignition testing. Their staff, along with FDA staff, health care workers, oxygen regulator manufacturers, and other technical experts participated in development of a standard incorporating the ignition test through a committee of the American Society for Testing and Materials (ASTM). The initial research was completed and a provisional standard developed and approved in October 2000, approximately 1 ½ years after the initial research began. Validation testing showed that damage produced from the laboratory simulation test is consistent with that observed in clinical use for problematic regulator designs. This shows that the test can be used to prevent unsafe

designs from entering the market in the future. Key members of industry have already used the test to assess the safety of their products and incorporated design improvements accordingly. In addition, the agency has used the test to evaluate proposed design changes for regulators that were recalled because of problems with fires. Testing of one problematic model showed that the firm's proposed retrofit will not completely resolve the fire hazards associated with their device. In addition to benefiting FDA, the test method will benefit the space program because it will help ensure use of safe oxygen regulators during spaceflight. Eventually, the test method may have applicability to other types of regulator technology, such as welding and scuba regulators.

## **U.S. FDA/CFSAN**

### Laboratory Certification:

The Grade A Milk safety laboratory certification program relies on-site inspection as well as annual proficiency testing evaluation forms developed through common agreement by all parties are used to review records, facilities, and analysts' performance of tests. The proficiencies cover the range of testing for which the laboratories are certified and the results are evaluated statistically. This program has enhanced public health protection by:

- verifying analysts' abilities to perform testing successfully;
- improving the quality of the work performed by the analysts, analysts' knowledge, and the credibility of results;
- more rapidly and accurately identifying pathogens leading to earlier and more successful treatment; and
- keeping drugs out of the milk supply.

### Retail Food Establishment Food Manager's Certification Program:

Via participation in the Conference for Food Protection (CFP), we are involved in a certification / accreditation program. The CFP now owns copyrighted Food Manager Certification Standards that are administered by ANSI under contract with the CFP. An FDA employee sits on an ANSI/CFP accreditation committee to ensure those standards are administered consistent with CFP's intent. This is the culmination of over 20 years of work to arrive at legally defensible national standards to which all the stakeholders have agreed; meaningful certification; a basis for reciprocity among the 3,000+ regulatory agencies in the United States; a single process for industry; and a straightforward method of fulfilling the FDA model Food Code.

## **Agency for Healthcare Research and Quality (AHRQ)**

During the past year, AHRQ has put special effort into monitoring its compliance with the National Technology Transfer and Advancement Act (NTTAA). In the spring of 2003, AHRQ staff invited senior NTTAA officials from the National Institute of Standards and Technology to brief relevant AHRQ staff members on compliance issues

with NTTAA. This briefing has led to increased awareness and tracking of AHRQ's principal support for voluntary consensus standards setting, which comes through the Agency's support for the National Quality Forum (NQF). The NQF is a not-for-profit membership organization created to develop and implement a national strategy for health care quality measurement and reporting. AHRQ is a charter member of the NQF and provides funding for the NQF through a contract and small conference grants. The NQF is the first, and only, organization in U.S. health care, that brings together a membership of provider, purchaser, consumer, and research and quality improvement organizations to develop consensus on health care standards. During this past year, AHRQ funding helped support the development of five sets of voluntary, consensus-based standards for quality measurement. Work continues on some of these measure sets and will be completed (and reported on) in FY 2003. These standards for quality measurement were in the following areas:

- Diabetes care
- Nursing home performance
- Hospital performance
- Safe practices for better healthcare
- Cancer care
- Translating Research into Practice (TRIP) initiative is in its second iteration

#### **Center for Disease Control (CDC)**

To new to the process to provide good case studies. The agency is very involved in the voluntary standards process and has been for a number of years. See <http://intranet.cdc.gov/nedss/WhatIsNEDSS.htm> for an example of a current system using voluntary consensus standards.

#### 10. Comments.

For a regulatory agency such as FDA, neither a categorical nor a transactional designation correctly describes how we use these standards. Six hundred and one (601) is the total number of voluntary consensus standards listed by FDA as of the end of the current reporting period that can be referenced by applicants for market approval of medical devices. Applicants can reference these standards in lieu of submitting data to meet approval requirements. For the Department, the total number of standards recognized is 616 and includes standards used by the Centers for Medicare and Medicaid Services.

**Department of Housing and Urban Development**

1. Number of government unique standards used in lieu of voluntary standards .

2

Government Standard	Voluntary Standard	Explanation
28 CFR 200.93 5	ANSI A119.1 N	HUD Building-Product Standards & Certification Programs.
28 CFR 3280	ANSI A119.1 and NFPA 501C	HUD-Unique Manufactured Home Construction & Safety Standards.

2. Number of voluntary consensus standards substituted for government unique standards.

1

Voluntary Standard	Government Standard
NFPA 501	45 CFR 3280

3. Number of voluntary consensus standards used in FY 2001.

300

4. Number of agency employees participating in voluntary consensus standards activities.

10

5. Number of voluntary consensus standards bodies in which there is agency participation.

5

American Society of Testing and Materials (ASTM)  
 Federal Geographic Data Committee (FGDC)  
 International Committee for IT Standards (INCITS), (formerly the National Committee of IT Standards [NCITS], also, formerly known as Computer Business Equipment Manufacturers Association [CBEMA])  
 The International Standards Organization (ISO)  
 The National Fire Protection Association (NFPA)



6. How do you report your use of standards?
  - a. No response.
  - b. No response.
  - c. No response.
  - d. No response.
  - e. No response.
7. Provide an evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

This policy continues to be effective in replacing federal standards with public-domain standards. This has resulted in more timely, up-to-date, and technically accurate standards. The Department of Housing and Urban Development (HUD) suggests Circular A-119 use stronger language to encourage agencies to be more active in determining which standards are applicable to the agency's activities and when standards are identified, motivate the agency to be more assertive in enforcing their use.

8. Provide the conformity assessment activities in which the agency has been involved.

All of HUD's 25 conformity assessment (CA) programs, under the HUD Building-Products Standards & Certification Programs, comply with the ISO guidelines & procedures. These are the same standards used by ANSI and other nationally recognized third-party certification agencies.

9. Recent examples or case studies of standards successes.

### **I. Office of Policy Development and Research**

Department/Agency U.S. Department of Housing and Urban Development (HUD)  
Office of Policy Development & Research  
451 Seventh Street, SW  
Washington, DC 20410  
Phone: (202) 755-4370  
Fax: (202) 708-5873  
URL address: <http://www.hud.gov/progdesc/pdrindx.cfm>

The HUD Office of Policy Development & Research (PD&R) has recently completed an assessment of HUD's own Minimum Property and Technical Suitability of Products program. This major study recommends that the Department extend its reliance on voluntary standards in two ways. First, the study recommends that HUD totally abandon

the MPS for single-family housing in all aspects totally relying on the model codes, especially the ICC & IRC codes and remove all remaining references to the MPS in HUD regulations. This would clarify the reality of HUD not using its own standards in any way or shape. Second, the study recommends that HUD abandon its own “Technical Suitability of Products” program relying instead on the National Evaluation Service to review all innovative or other products that do not meet the prescriptive standards of the model codes. This major study is now under review by the Assistant Secretary for Housing. If adopted, this major reform will further strengthen our reliance on the voluntary and private consensus process in lieu of HUD developed standards and criteria.

Second, HUD’s Partnership for Advancing Technology in Housing (PATH) is continuing to encourage private industry to develop standard XML definitions for use in Internet based home construction commercial transactions. These will be used among specific home construction entities. One of the group's objectives is to improve the speed of construction in order to make houses more affordable. Sharing the same technical language and being able to speak quickly and accurately is a big challenge. Applying information technology seemed to be one solution. However, the group did not know how to implement it.

The first industry-based group from the timber manufacturing industry approached PATH to assist them in convening hearings and task groups to develop such a common language (in this case, through XML tag sets) so that it would become an industry de facto "standard." PATH is now working with the window industry to develop similar XML tags for window industry tags will be used internally by the window industry and down through the distribution chain by wholesalers and homebuilders for the just in time ordering of products through Web-based tools.

These efforts have stimulated the first industry-based attempts to posit these standard definitions (most attempts have been top-down and unsuccessful). Also, because government served only in a facilitation capacity, industry did all the work! We plan to continue this work under PATH with different groups in the construction industry; we currently have three lined up.

## **II. MANUFACTURED HOUSING**

Department/Agency U.S. Department of Housing and Urban Development (HUD)  
Federal Housing Administration (FHA)  
Office of Housing  
Office of Consumer and Regulatory Affairs  
Manufactured Housing and Standards Division  
HSCM Room 9152  
451 Seventh Street, SW  
Washington, DC 20410-8000  
Hotline for complaints: 1-800-927-2891  
Phone: (202) 708-6409

Fax: (202) 708-4213  
e-mail: [mhs@hud.gov](mailto:mhs@hud.gov)  
URL address: <http://www.hud.gov/fha/sfh/mhssht3.html>

Initiated 1976.

Compliance Mandatory.

Authority National Manufactured Housing Construction and Safety Standards Act, P.L. 93-382, 42 U.S.C. 5407. 24 CFR Part 3280.

Aim: To reduce the number of personal injuries and deaths, cost of insurance, and property damage resulting from manufactured home accidents and to improve the quality and durability of manufactured homes.

Benefits: Uniform nationwide certification program has accomplished the stated purposes of the Act and improved interstate commerce in manufactured housing.

Methodology: As required by the Manufactured Housing Improvement Act of 2000, HUD is now relying on a private consensus committee administered by the National Fire Protection Association (NFPA) to develop new regulations for revising HUD's Manufactured Housing Standards. As required by law, this change moves towards greater reliance on a formal consensus committee. In the past, HUD consulted with an Advisory Committee, which had a very limited role. By law, this new committee must follow ANSI standards and apply to ANSI for accreditation. In addition, this consensus committee is developing, for the first time, model installation standards that must be completed this year. The consensus committee held its second full meeting in December 2002, and established its structure and committees. The installation subcommittee is making good progress using NFPA 225 Model Installation standards as its initial starting document.

Term: Indefinite term.

Reciprocity: Other federal agencies and state agencies.

Standards, Codes: Agency references standards prepared by others and or regulations incorporates requirements in the Federal Manufactured Home Construction Safety Standards (24 CFR Part 3280). Enforcement is in accordance with Procedural and Enforcement Regulations (24 CFR Part 3282).

Keywords: Design approval; housing requirements; inspection; manufactured housing; product safety.

**10. Comments.**

HUD's ten participants in Standards Developing Organizations (SDO's) are from HUD's Office of Policy, Research, and Development(R); Office of Healthy Homes & Lead-Hazard Control (L); Office of Housing-Federal Housing Commissioner (H); and Office of the Chief Information Officer (Q).

Following are some acronyms used in this and similar reports:

**STANDARDS-RELATED ACRONYMS**

**ACRONYM DESCRIPTION**

A-119	OMB's Circular that posits presidential-mandated standards activities for U.S. Government Agencies
ACM	Association of Computing Machinery
ASC	Accredited Standards Committee
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASQC	American Society for Quality Control
ASTM	American Society for Testing & Materials
ATIS	Alliance for Telecommunications Industry Solutions
CA	Conformity Assessment
CCITT	Comite Consultatif International Telegraphique et Telephonique (now ITU- T)
CD	Committee Draft
CE	European Community (mark), an icon required for products sold in the European Union (Dubbed an 800-lb gorilla)
CE	Consumer Electronics
CEN	European Committee for Standardization (Comite European de Normalisation)
CENELEC	Comite European de Normalisation ELECtrotechnique [European Committee for Electrotechnical Standardization]
CS	Central Secretariat
DIN	Deutsches Institut fur Normung (German Standardization Institute)
DIS	Draft International Standard Dresden Agreement (See the definition in the ANSI NSS brochure)
EC	European Commission
ECI	Environmental Condition Indicator
EFTA	European Free Trade Association
EIA	Electronics Industries Association
ENV	European Pre-standard

EPE	Environmental Performance Evaluation
ETSI	European Telecommunications Standards Institute
EU	European Union
FDIS	Final Draft International Standard
FTCA	Federal Trade & Communications Act
GATT	General Agreement on Tariffs & Trade
GMC	(ANSI's) Government Member Council
ICSP	InterAgency Committee for Standards Policy
IEC	International Electro-technical Commission
IEEE	Institute of Electronic & Electrical Engineers
INCITS	International Committee on Information Technology Standards
IPC	Institute for Interconnecting & Packaging Electronic Circuits
IPR	International Property Rights
IS	International Standard
ISO	International Organization for Standardization (Fr)
ITI	Information Technology Industry (Council)
ITU-T	International Telecommunication Union- (Standardization Division), formerly CCITT
JTC/1	Joint (ISO/IEC) Technical Committee (for Information Technology) 1
LCA	Lifecycle Assessment
MPI	Management Performance Indicator
NC	National Committee
NCITS	(EN cites) National Committee for Information Technology Standards [obsolete; see INCITS]
NEMA	National Electrical Manufacturers Association
NIST	National Institute of Standards & Technology
NP	New Work-Item Proposal
NSS	National Standards Strategy (ANSI)
NSSN	National Standards System Network (An email-based source for Global Standardization: <a href="http://www.ansi.org">www.ansi.org</a> )
NTTAA	National Technology Transfer & Advancement Act (PL 104-113)
OPI	Operational Performance Indicator
OSI	(ISO) Open Systems Interconnection
PCMCIA	Personal Computer Memory Card International Association
PrEN	Preliminary European Standard
PL	Public Law
RI	Regulatory Interface
SAE	Society of Automotive Engineers
SAGE (ISO)	Strategic Advisory Group on the Environment
SC	Subcommittee
SDO	Standards Developing Organization
SES	Standards Engineering Society
SI	International System of Units
SME	Subject Matter Expert
SSM	Strategic Standardization Management

TA	Technical Advisor
TAG	Technical Advisory Group
TC	Technical Committee
TMB	(ISO) Technical Management Board
TSP	Proposal for a New Field of ISO Technical Activity (Fr)
USITACS	United States International Telecommunications Advisory Committee for Standardization (DOS)
USNC	United States National Committee
VA	Vienna Agreement (See the definition in NSS)
WD	Working Draft
WG	Working Group
WTO	World Trade Organization

Questions regarding HUD's standards may be directed to David Engel (202-708-4370, ext 5724) or e-mail: [David\\_Engel@hud.gov](mailto:David_Engel@hud.gov).

## Department of the Interior

1. Number of government-unique standards used in lieu of voluntary consensus standards.

2

- (a) The Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM)

Use of the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) was mandated by OMB Circular A-16 (revised) and precludes the use of voluntary private sector standards as a replacement. The Federal Geographic Data Committee (FGDC) is committed to using voluntary consensus standards, such as those developed through ISO and ANSI, consistent with OMB Circular A-119. FGDC is a strategic member of the OpenGIS Consortium (OGC).

- (b) Bureau of Reclamation (BOR) Standard Specification for Corrugated Polyethylene Drainage Tubing

Most BOR construction contracts reference industry standards in the actual construction specifications. A prior provision that listed myriad standards was removed because the FAR requires that standards be listed with their most current approval dates, and this rendered provision maintenance impracticable. Government-unique specifications would be incorporated into solicitations through one of four provisions prescribed at FAR 11.204.

§11.204 Solicitation provisions and contract clauses.

- (a) The contracting officer shall insert the provision at 52.211-1, Availability of Specifications Listed in the GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, in solicitations that cite specifications listed in the Index that are not furnished with the solicitation.
- (b) The contracting officer shall insert the provision at 52.211-2, Availability of Specifications Listed in the DoD Index of Specifications and Standards (DoDISS) and Descriptions Listed in the Acquisition Management Systems and Data Requirements Control List, DoD 5010.12-L, in solicitations that cite specifications listed in the DoDISS or DoD 5010.12-L that are not furnished with the solicitation.
- (c) The contracting officer shall insert a provision substantially the same as the provision at 52.211-3, Availability of Specifications Not Listed in the GSA Index of Federal Specifications, Standards, and Commercial Item

Descriptions, in solicitations that cite specifications that are not listed in the Index and are not furnished with the solicitation, but may be obtained from a designated source.

- (d) The contracting officer shall insert a provision substantially the same as the provision at 52.211-4, Availability for Examination of Specifications Not Listed in the GSA Index of Federal Specifications, Standards, and Commercial Item Descriptions, in solicitations that cite specifications that are not listed in the Index and are available for examination at a specified location.

- 2. Number of voluntary consensus standards substituted for government-unique standards.

0

- 3. Number of voluntary consensus standards used in FY 2002.

616

- 4. Number of agency employees participating in voluntary consensus standards activities.

300

- 5. List of voluntary consensus standards bodies in which there was agency participation.

19

American Petroleum Institute (API)  
American Concrete Institute (ACI)  
American Institute of Steel Construction (AISC)  
American National Standards Institute (ANSI)  
American Society for Testing and Materials (ASTM)  
American Welding Society (AWS)  
Ground Water Protection Council (GWPC)  
International Organization for Standardization (ISO)  
National Association of Corrosion Engineers (NACE)  
Petrotechnical Open Software Corporation (POSC)  
American Society of Photogrammetry and Remote Sensing (ASPRS)  
American Society of Civil Engineers (ASCE)  
American Society of Mechanical Engineers (ASME)  
American Society for Testing and Materials (ASTM International)  
American Concrete Institute (ACI International)  
Institute of Electrical and Electronic Engineers (IEEE)  
American Water Works Association (AWWA)  
Inter-Organizational Resource Information Coordinating Council (IRICC)



State Historic Preservation Offices (SHPO)

6. How agencies report their use of standards.

- a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards or (3) both first time and continued uses of standards?

Both first time and continued use.

- b. Does your agency report (1) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?

Both.

- c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?

Both.

- d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?

Yes.

- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Yes.

7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

Since its issuance, Circular A-119 has worked in a straightforward manner to encourage the use of voluntary consensus standards and DOI has as a result increased its participation in voluntary standards groups, both domestic and international. The nature of the scientific research the DOI performs makes the use of voluntary consensus standards a required tool.

The DOI has attempted to enlist support for the development of its data standards (where no voluntary consensus standards exist) both from other agencies and from the public. The recognition of interagency efforts in promoting standards seems to be lost in this data call. Assistance from the ICSP or NIST may be needed to support these efforts.

While the guidance in the OMB Circular A-119 appears to be sufficient in the terms of outlining the basic functions and responsibilities of federal agency standards activities,

some simplification and clarification of the reporting process appears necessary. Many of the definitions provided in the circular reference each other without fully defining the word or its implication in operational activities.

While every attempt was made to provide complete information for this report, DOI as well as other agencies may be unaware of the standards they use. It might be useful to provide information on the availability of standards and how they can be used.

8. Conformity assessment activities in which agencies were involved.

No report.

9. Examples or case studies of standards successes.

The Department of the Interior submitted one case study of standards success. Interior reported that the Minerals Management Service of the Department streamlined its financial reporting system thereby increasing productivity and reducing the cost of reporting with an electronic reporting solution.

10. Additional comments.

None.

**Department of Justice**

1. Number of government-unique standards used in lieu of voluntary consensus standards.

None reported.

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards.

None.

3. The number of voluntary consensus standards that your agency used in FY 2002 based upon procedures set forth in Sections 11 and 12 of the Circular.

72

4. Number of agency employees participating in voluntary consensus standards activities during FY 2002.

5

5. Name and acronym of voluntary consensus standards bodies in which your agency participated during the reporting period.

Global Justice Information Network (GLOBAL)  
Office of Law Enforcement Standards (OLES) of the National Institute of Justice (NIJ)

6. A description of how your agency currently reports its use of voluntary consensus standards.

Does your federal agency report:		
(1)	Only the first-time use of a standard	Yes
(2)	Continued uses of standards	No
(3)	Both first-time and continued use of standards	No
Does your agency report:		
(1)	The total number of standards it uses	Yes
(2)	Each instance where the agency uses a standard	No
Does your agency report multiple editions of a single standard as:		
(1)	As one standard used	Yes
(2)	As multiple standards used	No
Does your agency report standards that it uses for		
(1)	Guidance purposes	Yes

(2)	Compliance purposes	No
Does your agency report use of standards from non-ANSI accredited standards developers including industry consortia?		Yes

- An evaluation of the effectiveness of circular A-119 policy and any recommendations for changes to the Circular.

Circular A-119 policy compliance reporting has improved with the emphasis placed on understanding the difference between the one-time versus multiple uses of standards. It allows greater visibility into the magnitude of voluntary consensus standard utilization.

- Identify conformity assessment activities in which your agency has been involved.

The Office of Science and Technology of the National Institute of Justice (NIJ) in collaboration with the National Institute of Standards and Technology (NIST) continues to sponsor the Office of Law Enforcement Standards. OLES (a) develops methods for testing equipment performance; (b) develops methods for examining evidentiary materials; (c) develops standards for equipment and operating procedures; (d) develops standard reference materials; and (e) performs other scientific and engineering research as required by the criminal justice and public safety communities. This interagency cooperative effort results in improvements in the quality and consistency of various conformity assessment requirements and processes at the federal, state, and local levels.

- Provide any examples of case studies or standards successes.

The Department sponsors the Global Justice Information Network (GLOBAL) to promote interoperability among federal, state, and local law enforcement and public safety agencies. This effort currently focuses in two areas (a) data standardization and (b) technology standards. The data standardization effort uses commercial technology to define information “tags” that allow an organization to completely and unambiguously identify information for exchange. By providing a central registry of standard data schema, organizations at all levels can build systems to interoperate by implementing these data standards. The technology standardization effort provides a registry that contains references to voluntary consensus standards in use by organizations at the federal, state, and local level. It allows organizations to gain insight into the extent that particular standards are being employed by others so that they can make sound decisions as to which standards they choose to use when implementing systems. This effort allows the standards direction to be “market” driven as it provides visibility into the use of standards but does not mandate usage.

- No comment.

## Department of Labor

1. As required by P.L. 104-113, you must highlight all instances where the agency used government-unique standards in lieu of voluntary consensus standards during FY 2002. For each instance, you must identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Equally as important, you must clearly state your agency's rationale for such use.

DOL did not issue any government-unique standards in lieu of voluntary consensus standards during FY 2002. It did, however, issue four (4) standards that were based on national consensus standards, including the following:

OSHA:           (1) Exit Routes and Signs  
                    (2) Signals and Barricades

MSHA:           (1) Electric Motor-Driven Mine Equipment and Accessories and High-Voltage Longwall Equipment Standards for Underground Coal Mines  
                    (2) Hazard Communication

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

0

3. The number of voluntary consensus standards that your agency used during FY 2002, based upon procedures set forth in Sections 11 and 12 of the Circular.

200

Note: The number of standards used has greatly increased from last year because we are now counting the number of consensus standards used to support issuance of Section 5(a)(1) (General Duty clause of the OSH Act) violations. In most cases, the consensus standard used is a more current version of a consensus standard that has been incorporated by reference in the OSHA standards or a consensus standard addressing an area not specifically covered by an OSHA standard.

4. The number of agency employees participating in voluntary consensus standards activities during this period.

60

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

American Conference of Governmental Industrial Hygienists (ACGIH)  
American Industrial Hygiene Association (AIHA)  
American Institute of Mining Engineers (AIMME)  
American National Standards Institute (ANSI)  
Acoustical Society of America (ASA)  
American Society of Mechanical Engineers (ASME)  
American Society for Testing and Materials (ASTM)  
Commercial Vehicle Safety Alliance (CVSA)  
Federal Laboratory Consortium (FLC)  
International Electrotechnical Committee (IEC)  
Institute of Electrical, Electronic Engineers (IEEE)  
International Society for Measurement and Control (ISA)  
National Fire Protection Association (NFPA)  
Society of Automotive Engineers (SAE)  
Underwriters' Laboratories (UL)

6. A description of how your agency currently reports its use of voluntary consensus standards.
- a. Does your federal agency report (1) only the first-time use of standards, continued uses of standards or (3) both first time and continued uses of standards?  
  
DOL reports first time use only.
  - b. Does your agency report (1) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?  
  
DOL reports the total number used.
  - c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?  
  
DOL is counting multiple editions as multiple uses.
  - d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?  
  
DOL is only counting standards used for compliance purposes, none of the uses reported were used for guidance purpose.
  - e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

DOL does not report non-ANSI accredited standards developers.

7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

Highly effective, no recommendations for changes are made by DOL.

8. No comment.

9. No comment.

10. No comment.

## Department of State

The Department of State has a major policy role in telecommunications standards as obligated by international treaty, and coordination roles in other areas. The Bureau of Economic and Business Affairs (EB) represents the Department of State on the Interagency Committee on Standards Policy (ICSP), the Government Member Council, and the Information Infrastructure Standardization Panel (IISP) and its steering committee at the American National Standards Institute (ANSI). The Department is not involved in the actual development of technical standards.

The Department represents the United States of America administration under the treaty obligations found in the Convention of the International Telecommunication Union (ITU), Minneapolis, 1998, and the Inter-American Telecommunication Commission (CITEL) of the Organization of American States (OAS). The Department of State, through the EB Communications and Information Policy Deputate (CIP), provides the forum for development of positions and contributions for presentation at ITU and CITEL meetings where international telecommunication recommendations (voluntary standards) and telecommunication standardization policies are written. The Department authorizes and/or hosts public meetings under the Federal Advisory Committee Act, where advice on telecommunication standardization and policy issues is offered by the private sector telecommunications industry. The Department also bases its decisions on advice from other public sector agencies (DoD, the National Institute of Standards and Technology [NIST], the National Telecommunications and Information Administration [NTIA], the National Aeronautics and Space Administration [NASA], and the Federal Communications Commission [FCC]). The Department coordinates, leads, and/or accredits United States delegations to ITU and CITEL technical and policy meetings.

More than 100 U.S. corporations are participating members of the ITU; more than 30 are associate members of CITEL's permanent Consultative Committee, under the sponsorship of the State Department. Those companies and interested government agencies participate and play major roles in the ITU and CITEL Study Groups and Working Parties that actually write the standards. Within that process, a great deal of interaction takes place with other standards setting organizations, such as the International Organization for Standardization (ISO), ANSI, ANSI-accredited Committee T1, and the Telecommunications Industry Association.

In addition to accrediting and supporting delegations to the ITU and CITEL, the Department's International Organization Affairs Bureau (IO) accredits and funds participation by relevant specialized agencies (the Departments of Agriculture, Commerce, Transportation, and NIST) and private sector groups in the deliberations of the Economic Commission for Europe (ECE) Working Party on Standardization, especially where they have a direct bearing on U.S. commercial interests. While the standards developed in the ECE are not officially adopted for use in the United States they serve as guides for adjusting product design and are widely taken into account in manufacturing plans.



## Department of Transportation

1. As required by P.L. 104-113, you must highlight all instances where the agency used government-unique standards in lieu of voluntary consensus standards during FY 2002. For each instance, you must identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Equally as important, you must clearly state your agency's rationale for such use.

RSPA had no instances to report where government-unique standards were used in lieu of voluntary consensus standards.

FRA - There were no instances where FRA used government-unique standards in lieu of voluntary consensus standards.

USCG – None.

FMCSA - FMCSA used government-unique standards in lieu of voluntary consensus standards when it implemented its final rule to allow inspectors to use performance-based brake testers (PBBTs) to check the brakes on large trucks and buses for compliance with federal safety standards and to issue citations when these vehicles fail (67 FR 51770, August 9, 2002). The FMCSA evaluated several PBBTs during a round robin test series to assess their functional performance and potential use in law enforcement. The standard, a specific configuration of brake forces and wheel loads on a heavy-duty vehicle, was used to evaluate the candidate PBBTs and their operating protocols. The agency's rationale for use of the government-unique standards was to verify that these measurements and new technology could be used by law enforcement as an alternative to stopping distance tests or on-road deceleration tests. PBBTs are expected to save time and their use could increase the number of commercial motor vehicles that can be inspected in a given time. Only PBBTs that meet specifications developed by the FMCSA can be used to determine compliance with the Federal Motor Carrier Safety Regulations. The final rule represents a culmination of agency research that began in the early 1990s.

MARAD – None.

FTA – None.

FHWA (ITS) – None.

NHTSA – None.

FAA - FAA sets standards in numerous areas pertaining to aviation. FAA's policy is to use voluntary consensus standards where available. In certain cases, such as Capability Maturity Model (CMM) standards, FAA modifies them for its own internal use (FAA's system is called the Integrated Capability Maturity Model [iCMM]). We are not aware of

an instance where FAA uses government-unique standards in lieu of voluntary consensus standards.

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period as a result of an agency review under section 15b(7) of the Circular.

RSPA – None.

FRA – None.

USCG – None.

MARAD – None.

FMCSA – None.

FTA – None.

FHWA – None.

NHTSA – None.

FAA – None.

3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in Sections 11 and 12 of the Circular.

RSPA's Office of Hazardous Materials Safety has used approximately 120 voluntary standards and its Office of Pipeline Safety has used approximately 70 voluntary standards based on the procedures set forth in Sections 11 and 12 of the Circular.

FRA has used two voluntary consensus standards under Section 11 of the circular.

USCG – None.

FMCSA - The following six standards have been adopted in place of government-unique standards: Underwriters Laboratories, Inc. (49 CFR 393.95), American Society for Testing and Materials (49 CFR 393.102), National Association of Chain Manufacturers (49 CFR 393.102), Web Sling and Tiedown Association (49 CFR 393.102), Wire Rope Technical Board (49 CFR 393.102), and the Cordage Institute (49 CFR 393.102).

MARAD – None.

FTA – None.

FHWA – The ITS Standards Program does not itself use or require use of standards. However, the Program has cooperative agreements with five standards development organizations (SDOs) and supports the development and deployment of almost 100 voluntary consensus standards that they are producing. The standards are for intelligent transportation systems deployed by state, regional, and local transportation agencies, as well as by private-sector organizations.

NHTSA – Five.

Air Brake Systems (66-FR-64154, December 12, 2001), amended the truck air brake system standard to clarify the test procedures. NHTSA adopted portions of an SAE standard.

Tires (67-FR-10050, March 5, 2002), Notice of Proposed Rulemaking responded to the Transportation Recall Enhancement, Accountability, and Documentation Act of 2000, requiring a revised, updated tire standard. The proposal models part of the new standard on an existing SAE standard.

Low Speed Vehicles (67-FR-46149, July 12, 2002), Notice of Proposed Rulemaking responded to petitions on low-speed vehicles to be equipped with safety warning labels and conspicuity features. The proposal uses of various SAE and American Society of Agricultural Engineers (ASAE) voluntary standards.

Moving Barrier Tires (66-FR-51629, October 10, 2001), NHTSA issued a notice of proposed rulemaking to update the Federal Motor Vehicle Safety Standards (FMVSS) on side impact protection and fuel system integrity by requiring that radial tires of certain specifications, rather than bias ply tires, be used on the moving barriers specified in those standards. One of the two tire types under consideration came from a SAE recommended practice, J972 “Moving Rigid Barrier Collision Tests.”

Advanced Air Bags (66-FR-65376, December 18, 2001), NHTSA issued a final rule that responded to petitions for reconsideration of the May 12, 2000, FMVSS No. 208 final rule on advanced air bags. In that final rule we incorporated out-of-position tests that were originally developed by the International Standards Organization (ISO) as part of the proposed low-risk deployment test requirements using the small female dummy on the driver-side and the 3-year-old and 6-year-old dummies on the passenger-side. This notice made amendments to those test procedures in response to the petitions for reconsideration.

FAA – See following list.

iCMM, ISO 9001:2000 and Revised Management Plan for Explosives Detection System Certification Testing

ISO (various series)

CMM (various series)

IEEE 1074-1997 “IEEE Standard for Developing Software Life Cycle Processes”

IEEE 1016-1998 “IEEE Recommended Practice for Software Design” Descriptions” (sets the standard for documenting designs for software, either via paper or software documentation tools)

Mil Std. 1472

MIL-E-1H (or latest version)

Boff Engineering Data Compendium

SAE G10 HF group

“Human factors issues in free flight” (ARD-50057)

“Minimum human factors standards for air traffic services provided via data communications utilizing the ATN, Builds 1 and 1A” (RTCA/DO-256)

ANSI z39.5, z39.18

ANSI standard “Guide to Human Performance Measurement” G-035-1992

ANSI/HFS 100-1988, The American National Standard for Human Factors Engineering of Visual Display Terminal Workstations

MARC 21, The Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK) standard gives an outline to follow for projects, including software, engineering, construction, etc.

ANSI/ASQC, Quality System-Model for Q9001-1994 Quality Assurance in Design, Development, Production, Installation, and Servicing

ANSI/ISO/ASQC Q9001-1994, Quality Systems-Model for Quality Assurance in Design, Development, Production, Installation, and Servicing

ANSI/ISO/ASQC Q9002-1994, Quality Systems-Model for Quality Assurance in Production, Installation, and Servicing

ANSI/ISO/ASQC Q9003-1994, Quality Systems-Model for Quality Assurance in Final Inspection and Test

FAA-E-2892B, WAAS Functional and Performance Specification

FAA-D-2494B, Technical Instruction Book Manuscript:  
Electronic, Electrical, and Mechanical Equipment, Requirements for Preparation of  
Manuscript and Production of Books

FAA-E-2749A, Radio Communications Links

FAA-E-2786, Data Multiplexing Network (DMN) Equipment Specification

FAA-G-1375C, Spare Parts-Peculiar for Electronic, Electrical and Mechanical  
Equipment

FAA-G-2100F, Electronic Equipment, General Requirements

FAA-D-2706, Theory of Operations, Examinations, Preparation, and Validation of  
FAA-D-2781, Preparation of Validation for Performance Exams

ANSI-STD-X3.159-1987, C Programming Language

4. The number of agency employees participating in voluntary consensus standards activities during this period.

RSPA – 43

FRA - 8

FMCSA – 17

MARAD – 10

FHWA -12

FTA – 6

NHTSA – 20

FAA – 60

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

Air Movement and Control Association (AMCA)

American Association of State Highway and Transportation Officials (AASHTO)

American Boat and Yacht Council (ABYC)  
American Bureau of Shipping (ABS)  
American National Standards Institute, Inc. (ANSI)  
American Petroleum Institute (API)  
American Public Transportation Association (APTA)  
American Railway Engineering and Maintenance-of-Way Association (AREMA)  
American Society for Testing and Materials (ASTM)  
American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)  
American Society for Nondestructive Testing (ASNT)  
American Society of Mechanical Engineers (ASME)  
Association of American Railroads (AAR)  
Canadian General Standards Board Tank Car Committee  
Compressed Gas Association (CGA)  
Cordage Institute (CIA)  
Expansion Joint Manufacturers Association (EJMA)  
Factory Mutual Engineering and Research (FMER)  
Fluids Control Institute (FCI)  
Groupe de Travail Brussels 1958 (GTB)  
Illuminating Engineering Society of North America (IES)  
Institute of Electrical and Electronics Engineers (IEEE)  
Institute of Transportation Engineers (ITE)  
International Association of Drilling Contractors (IADC)  
International Atomic Energy Agency (IAEA)  
International Cargo Gear Bureau (ICGB)  
International Civil Aviation Organization (ICAO)  
International Commission on Illumination (ICI)  
International Electrotechnical Commission (IEC)  
International Maritime Organization (IMO)  
International Organizations for Standardization (ISO)  
International Society for Measurement and Control (ISA)  
International Telecommunication Union Radiocommunication Bureau (ITU-R)  
ITS America (ITS)  
Lloyd's Register of Shipping (LR)  
Manufacturers Standardization Society of the Valve and Fittings Industry (MSS)  
NACE International (NACE)  
National Board of Boiler and Pressure Vessel Inspectors  
National Electrical Manufacturers Association (NEMA)  
National Fire Protection Association (NFPA)  
North American Transport of Dangerous Goods Standard (NATDGS) Working Group  
Oil Companies International Marine Forum (OCIMF)  
Organization for Economic Cooperation and Development (OECD)  
Radio Technical Commission for Maritime Services (RTCM)  
Society of Automotive Engineers (SAE)  
Technology and Maintenance Council (TMC)  
The American Association of Motor Vehicle Administrators (AAMVA)

The Commercial Vehicle Safety Alliance (CVSA)  
The National Safety Council (NSC)  
Transportation Research Board (TRB)  
Tubular Exchange Manufacturers Association (TEMA)  
Underwriters' Laboratories, Inc. (UL)  
United Nations Committee on the Transport of Dangerous Goods  
United Nations Economic Commission for Europe (ECE)

6. A description of how your agency currently reports its use of voluntary consensus standards. Specifically, you should be prepared to answer the following questions: (Note: Questions will be structured on the web entry database to accept either "Yes/No" or multiple-choice responses.)
- a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards or (3) both first time and continued uses of standards?
  - b. Does your agency report (1) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?
  - c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?
  - d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?
  - e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

RSPA—In reporting the total number of standards that it uses, RSPA has counted each standard once, not each instance where a standard is referenced, or each edition of a standard. RSPA is reporting the standards that are incorporated in its regulations. RSPA has reported both first time and continued use of voluntary standards. Thus, new standards are included in this overall total. The total number is increased to reflect newly added standards or reduced to reflect standards that have been dropped, as appropriate.

FRA—reports only the first time a standard is referenced in a given Part of 49 CFR, the total number of standards used in proposed rules or final rules that were published during the reporting period, multiple editions of a single standard as one standard, FRA reports standards used for compliance purposes, and use of standards from industry associations which are not (to our knowledge) ANSI accredited.

MARAD is not a user.

FTA - First time and continued use, reports the total number of standards it uses, multiple editions of a standard used are reported as one standard used, standards used for guidance purposes are reported, and uses non-ANSI accredited standards organizations.

FHWA - Reports first time and continued use, reports the total, multiple editions are considered as one, standards for guidance are reported, and non ANSI-accredited developed are used.

NHTSA - Reports only the number of new uses of standards. Counts all references to a particular standard as a single count. Multiple editions are counted as one standard. Some standards are from non-ANSI developers.

7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

RSPA, FRA, FMCSA, MARAD, FTA, FHWA, NHTSA, and FAA have no recommendations to change OMB Circular A-119 at this time.

8. Any conformity assessment activities in which your agency has been involved in the reporting period as described in the *Federal Register*, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities.

FRA's conformity assessment activities are visible internationally through expanded efforts in the area of safe, uniform international transport of hazardous materials by participation in the Canadian General Standards Board Tank Car Committee and the ASME Transportation Pressure Vessel Committee, as well as continuing to participate in the North American Transport of Dangerous Goods Standard (NATDGS) Working Group and the AAR Tank Car Committee, as reported last year. Participation in the six voluntary consensus standards bodies listed above, as well as in numerous committees and sub-committees of those bodies, gives FRA access to the developmental stages of private sector conformity assessment standards to make sure the agency viewpoint is considered in the development of their standards.

FMCSA—The FMCSA has used, or proposed, voluntary consensus standards agreed to by the Commercial Vehicle Safety Alliance's Information Systems Committee to determine what data elements should be collected and coded into State and national inspection and crash files. The decisions agreed to by this committee affect State enforcement personnel, the trucking industry, and anyone using the safety data. As called for in Section 225 of the Motor Carriers Safety Improvement Act of 1999 (Public Law 106-159, 113 Stat. 1748), the FMCSA has worked with the National Highway Traffic Safety Administration and the States to adopt the Commercial Vehicle Analysis Reporting System (CVARS). Since the beginning of calendar year 2001, an average of one staff member has participated in meetings with a number of states to gauge their commitment to participating in this new crash data collection approach. Although still in the pilot



stage, the FMCSA asked states to ensure that certain crash data are reported in an accurate, timely, and complete manner.

9. Examples or case studies of your agency's standards successes, if you so choose.

FRA - An example that has benefited both the agency and the private sector is FRA's work with the AAR Locomotive Committee to develop a standard for design, inspection, and maintenance of Remote Control Locomotives and Remote Control Transmitters. The payoff for this joint effort is to make the industry self-regulating to reduce or eliminate the need for federal regulation of this burgeoning technology.

10. Comments.

While the U.S. Coast Guard had adopted some industry standards in its regulations for many more years, in 1968 we made sweeping incorporations by reference of industry standards in our machinery and electrical regulations. At the same time, we started to be involved in standards organizations - at one time participating in over 200 standards committees. With the reduction in personnel and travel funds, we have pared down our involvement to the more important committees. During this time we have promoted the formation of several standards committees, most notably the ASTM F25 Committee on Ships and Marine Technology where we have developed a number of standards that have replaced CG regulations and Navy MILSPECS. We have involved the international community in this committee and have taken a leadership role in ISO TC 8 Ships and Marine Technology. We are the U.S. voting representative and the CG is the Secretariat for three of the Subcommittees. We have actively supported the adoption of ISO standards at the International Maritime Organization for inclusion in the SOLAS and MARPOL Conventions. We are also promoting development of ISO standards so, one day, we can accept foreign approved Life Saving Appliances (life jackets, lifeboats, etc) and have U.S. Approved LSA's accepted overseas.

In the past, we have also worked with our Naval Engineering Office to adopt industry standards in lieu of MILSPECS for CG vessels. We understand that our Deepwater project is going all out to use industry standards where at all possible.

Our training consists of on-the-job-training. We find the best way to understand industry standards and their organizations is to participate in them and have an experienced mentor to offer guidance. We find this works with industry folks as well. In the past when an industry person looks at the instructions on developing a standard, they say it is too hard and never call back. Now, when they call and ask about developing a standard, we say great, you are in charge of the drafting group, put together an outline of the standard, and send it to me in two weeks. We then send to their competitors and interested government people and tell them we are developing a standard, do you want to participate. The competitors always say yes, it's amazing.

Participating on a Standards Committee provides leadership, management, and scientific/engineering training to our young engineering graduates that they could never

get in a classroom or years of working in one office. Also, I can't tell you the number of times I have had to call a materials or welding expert when our field inspectors call with various problems from leaking steam boilers on 50 - 75 year old passenger steamboats to welding the latest thermally controlled rolled steel for a chemical tanker. This kind of "free" advice could never (be obtained) no matter how many government support contracts we have. Participating on a Standards Committee is a way of multiplying our limited human resources - The ASME Boiler and Pressure Vessel Committee alone provides over \$1M of volunteer labor annually. This Code forms the basis of our Machinery and Piping regulations and is adopted throughout 46 CFR Parts 52, 53, 54, and 56.

## Department of the Treasury

1. As required by P.L. 104-113, identification of all instances when the agency used government-unique standards in lieu of voluntary consensus standards. For each instance identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Clearly state the rationale for such use.

4

U.S. Customs continues to support two government unique standards; Customs and Trade Automated Interface Requirements (CATAIR) (Amendment 1, April 1996, Amendment 2, December 1996, Amendment 3, September 1997, and Amendment 4, 1998), and Customs Automated Manifest Interface Requirements (CAMIR) (Amendment 1, April 1997, and Amendment 2, July 1998). CATAIR is used by the Customs brokerage industry, and CAMIR is used by some parties in the transportation sector. Voluntary consensus standards used by Customs include the ANSI ASC X12 syntax and the United Nations EDIFACT record sets. This industry standard is being used for the receipt of electronic invoices from FedEx and Citibank for the FleetCard program. It is also being used by the Automated Export System trade users to transmit their data to Customs.

U.S. Customs policy requires that the management of Information Technology (IT) Investments conform to the requirements of the Investment Management Process (IMP) System Description, Version 2.1, dated March 15, 2000. This requirement has been developed in response to a key goal of the Clinger-Cohen Act. The goal is that agencies have processes and information in place to help ensure that IT projects are being implemented at acceptable costs, within reasonable and expected time frames, and are contributing to tangible, observable improvements in mission performance. The IMP uses the government-unique standard: "Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment decision-making," General Accounting Office (GAO/AIMD-10.1.13), in lieu of voluntary consensus standard ISO/IEC Software Process Improvement and Capability determination (SPICE, 15504).

U.S. Customs requires that systems documentation be prepared in conformance with its Systems Development Life Cycle (SDLC) procedures. The requirement is based on the need to ensure enterprise wide standards in areas such as security. The SDLC uses the government-unique standards: "Information Systems Life Cycle Manual," U.S. Treasury Department (TDP 84-01), in lieu of voluntary consensus standard ISO/IEC, IEEE Information Technology - Software Life Cycle Processes (12207), and the Software Capability Maturity Model Software Engineering Institute (SEI/SW-CMM, Version 1.1), in lieu of voluntary consensus standard ISO/IEC International Quality Standard (9001).

2. Identification of voluntary consensus standards that have been substituted for government-unique standards because of an agency review under section 15b (7) of the Circular.

0

No voluntary consensus standards have been substituted for government-unique standards because of agency review of existing standards. The maintenance of the government unique standards within Customs applications, the CATAIR and CAMIR formats, are at the request of the participating industry groups that use those standards.

Bureaus reported following the Software Engineering Institute (SEI) Carnegie Mellon University's Capability Maturity Model (CMM).

3. The number of voluntary consensus standards that the agency has used during FY 2002 based on the procedures set forth in sections 11 and 12 of the Circular.

334

U.S. Customs Service has used three voluntary consensus standards since October 1, 1999. The IRS Standards volume is a component of the IRS Enterprise Architecture. There are 235 standards contained within the Enterprise Architecture. The PRIME Contractor must follow the Enterprise Architecture for all project development and acquisitions often reference the Enterprise Architecture standards profile with approximately 235 standards. Depending on the nature of the individual project or acquisition, many of the standards may not apply. The Bureau of the Public Debt reported the use of 96 voluntary consensus standards. The remaining Treasury bureaus reported that an unknown number of voluntary consensus standards were used because of implementing commercial-off-the-shelf hardware and software.

4. The number of agency employees participating in voluntary consensus standards activities during this period.

66

There are 8 members of the NCBFAA ABI Automation Committee, 50 people participate in Task Group 9, 2 people participate in SEI and DC SPIN, 1 person participates on the ANSI Standard 43.3-1993 sub-committee for non-medical X-Ray and Sealed Gamma Ray sources, 1 person participates on sub-committee of the American National Standards Institute revising the ANSI Standard 43.17, 2 people participate in the G7 Initiative, and 10 employees (approximately) participated in TIGERS.

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

Customs continues to participate in the National Customs Brokers and Forwarders Association of America (NCBFAA) Automatic Broker Interchange (ABI) Automation Committee standards development body. This committee established government unique

standards and certification criteria for exchange of data between Customs and automated importers and brokers.

Customs chairs Task Group 9 under the Transportation Subcommittee (I) of the American National Standards Institute (ANSI) Accredited Standards Committee (ASC), X12. This group develops and maintains all transaction sets and record segments in the Customs transaction sets. Customs participates on a sub-committee of the American National Standards Institute revising the ANSI Standard 43.3-1993 for non-medical X-Ray and Sealed Gamma Ray sources.

Customs also participates in two voluntary consensus standards bodies: Software Engineering Institute (SEI) Carnegie Mellon University, and the Washington, D.C., Software Process Improvement Network (DC SPIN).

Customs participates in the Group of 7 (G7) Initiative, an effort to harmonize customs procedures among the G7 countries: United States, United Kingdom, Germany, France, Canada, Japan, and Italy. Declarations and cargo reports for imported and exported goods are being developed. A trader will be able to use the same message structure to report to any of the seven countries, eliminating the need to use country-specific data interchanges. Messages are being developed in the only United Nations recognized data interchange standard, Electronic Data Interchange for Administration, Commerce, and Trade (EDIFACT).

The Internal Revenue Service participates on the TIGERS (Tax Information Group for Electronic-communication Requirements Standardization) a working group of (ASC 12).

The Financial Management Service (FMS) fully supports the federal requirement to use technology standards. In the area of electronic data interchange (EDI), FMS has participated in the standards development process and implemented EDI using the American National Standards (ANSI) Accredited Standards Committee (ASC) X12 standard. FMS initiated EDI standards compliance with the requirements first outlined in the Federal Information Processing Standards 161-2, April 29, 1996.

Development of extensible markup language (XML) standards, United Nations Centre for Trade Facilitation and Electronic Business (UNI/CEFACT) Electronic Business Extensible Markup Language (ebXML) and ANSI ASC X12, with the intention of implementing the most appropriate XML standard.

6. A description of how your agency currently reports its use of voluntary consensus standards. Specifically, you should be prepared to answer the following questions
  - a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards or (3) both first time and continued uses of standards?

Yes for item number (3).

- b. Does your agency report (1) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?

Yes for item number (b).

- c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?

Yes, our agency reports multiple editions of a single standard as one standard used.

- d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?

Yes.

- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Various bureaus reported both yes and no for this element.

7. An evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

The guidelines in Circular A-119 are effective. Circular A-119 has placed the focus on using voluntary consensus standards as opposed to the development of government-unique standards. Wide use of voluntary consensus standards promotes the development of an increased number of standards compliant products facilitating the use of new technology and increasing flexibility to meet new requirements. No recommendations for changes at this time.

8. Any conformity assessment activities in which the agency has been involved in the reporting period as described in the *Federal Register*, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities.

The standards that Treasury bureaus have adopted will involve conformity assessment activities, which include internal audit and eventual certification in conformance with acceptable practices.

9. No comment.

10. No comment.

## Department of Veterans Affairs

1. Number of government-unique standards used in lieu of voluntary consensus standards.  
0
2. Number of voluntary consensus standards substituted for government-unique standards.  
0
3. Number of voluntary consensus standards used in FY 2002.  
0
4. Number of agency employees participating in voluntary consensus standards activities.  
14
5. List of voluntary consensus standards bodies in which there is agency participation.  
20

Interagency Committee on Seismic Safety in Construction (ICSS)  
National Institute of Building Sciences (NIBS)  
NIBS Construction Metrication Counsel  
NIBS Building Product Pre-Approval Program for Federal Construction  
NIBS Whole Building Design Guide (WBDG)  
American National Standards Institute (ANSI) A-117 Committee  
Architecture and Transportation Barrier Compliance Board (ATBCB)  
Federal Facilities Council (FFC)  
Builders Hardware Manufacturers Association (BHMA)  
American Institute of Timber Construction (AITC) ANSI/AITC A190.1 Committee  
National Fire Protection Association National Electrical Code (NFPA 70) Committee  
American Society of Heating and Air Conditioning and Refrigeration Engineers  
(ASHREA)  
American Society for Testing Materials (ASTM)  
Joint Commission on Accreditation of Healthcare Organizations (JCAHO)  
American National Standards Institute (ANSI)  
American Industrial Hygiene Association (AIHA)  
National Institute for Occupational Safety and Health (NIOSH)  
American Society of Mechanical Engineers Safety Code for Elevators and Escalators  
Committee (ASME A-17 Committee)  
American Society of Hospital Engineers (ASHE)  
Uniform Building Code (UBC)

6. How does your agency report the use of standards?

a. Does your federal agency report only the first-time use of standards, continued uses of standards or both first time and continued use?

Both first time and continued use of standards.

b. When reporting standards use, some agencies report uses of standards. That is, they count the total number of instances where the agency has referenced a standard. For example, three separate references to a single standard are counted as three standards uses. On the other hand, other agencies report standards used. These agencies report the number of standards that the agency references. In this case, each standard is counted only once regardless of how many times it is referenced by the agency. Using these definitions, how does your agency report?

Uses of standards.

c. Does your federal agency report multiple editions of a single standard as one standard or as multiple standards used?

Multiple.

d. Does your federal agency report standards that it uses for guidance purposes (as opposed to compliance purposes)?

Yes.

e. Does your federal agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

No.

7. Provide an Evaluation of the Effectiveness of Circular A-119 Policy and Recommendations for Any Changes.

The Veterans Health Administration accepts and conforms to standards developed by the Joint Commission on Accreditation of Healthcare Organization (JCAHO) for Veterans Affairs' (VA) health care facilities. Voluntary consensus standard requirements are utilized in the regulatory, contractual, and grants determinations executed by the Veterans Health Administration.



8. Provide the conformity assessment activities in which the agency has been involved.

The VA does not engage in conformity assessment activities. The VA strives to use industry based standards and commercial off-the-self products.

9. Provide any examples or case studies of standards successes.

No comment.

10. Comments.

Federal regulations prescribe standards that must be used (e.g., EPA laboratory standards and OSHA monitoring/sampling standards). Regardless of what may be developed by conformity assessment, VA is not relieved of its obligation to use standards prescribed by regulations. When not obligated to use a prescribed regulatory or other (e.g., JCAHO) standard, VA organizations must retain the flexibility to use the standard that best meets its programmatic needs.

## **APPENDIX B -- REPORTS OF INDEPENDENT AGENCIES AND COMMISSIONS**

This section contains the reports of the independent agency and commission reports as submitted by the agencies and commissions to NIST. Due to the need to have this year's information submitted via e-mail rather than through NIST's online process, many different formats were used by the various agencies and commissions to submit their information. Several agencies and commissions chose not to address the voluntary questions 7, 8, and 9. The information in this section reflects NIST's effort to present in a consistent format all of the data the agencies and commissions chose to submit. The substantive text and numerical responses of each agency's and commission's report remains as submitted.

The format NIST has chosen to present the submitted data is as follows:

### **Name of Independent Agency or Commission**

1. Number of government-unique standards used in lieu of voluntary consensus standards.
2. Number of voluntary consensus standards substituted for government-unique standards.
3. Number of voluntary consensus standards used in FY 2002.
4. Number of agency employees participating in voluntary consensus standards activities.
5. List of voluntary consensus standards bodies in which there was agency participation.
6. How agencies report their use of standards.
7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.
8. Conformity assessment activities in which agencies were involved.
9. Examples or case studies of standards successes.
10. Additional comments.

## **Agency for International Development**

1. Number of government-unique standards used in lieu of voluntary consensus standards.  
0
2. Number of voluntary consensus standards substituted for government unique standards.  
0
3. Number of voluntary consensus standards used in FY 2002.  
0
4. Number of agency employees participating in voluntary consensus standards activities.  
0
5. List of voluntary consensus standards bodies in which there is agency participation.  
N/A
6. The following questions relate to how your agency reports its use of standards. Please consider them carefully and answer each question to the best of your ability.
  - a. Does your federal agency report only the first-time use of standards, continued uses of standards or both first time and continued uses of standards?  
  
Both.
  - b. Please read the following brief explanation before responding to this question. When reporting standards use, some agencies report uses of standards. That is, they count the total number of instances where the agency has referenced a standard. For example, three (3) separate references to a single standard are counted as three standards uses. On the other hand, other agencies report standards used. These agencies report the number of standards that the agency references. In this case, each standard is counted only once regardless of how many times it is referenced by the agency.  
  
Using the above definitions, your agency reports:  
  
Standards Used.

- c. Does your federal agency report multiple editions of a single standard as one standard or as multiple standards used?

Multiple.

- d. Does your federal agency report standards that it uses for guidance purposes (as opposed to compliance purposes)?

No.

- e. Does your federal agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Not Applicable.

7. Provide an evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

USAID has no suggestions for changing Circular A-119.

8. Provide the conformity assessment activities in which the agency has been involved.

USAID participates in the Contractor Performance Reporting system developed and managed by the National Institutes for Health, including participating as a member of the committee that determines information requirements. This may be considered a conformity assessment activity since it is standardizing the way that the participating agencies assess contractors' performance.

9. Provide any examples or case studies of standards successes.

Nothing to report.

10. Comments.

N/A

## Consumer Products Safety Commission

1. Number of government-unique standards used in lieu of voluntary standards.  
0
2. Number of voluntary consensus standards substituted for government unique standards.  
1  

voluntary standard	ASTM F977
government standard	FR/Vol. 67, No. 90/May 9, 2002, pp 31165-31166
3. Number of voluntary consensus standards used in FY 2002 (Transactional).  
1
4. Number of agency employees participating in voluntary consensus standards activities.  
29
5. Number of voluntary consensus standards bodies in which there is agency participation.  
8 -- ANSI, ASME, ASTM, CSA, DASMA, NFPA, SVIA, and UL
6. How We Report:
  - a. Report only first-time use of standards,
  - b. Report the total number of standards used,
  - c. Report multiple editions as one standard used,
  - d. Do not report standards used for guidance,
  - e. Report use of standards from non-ANSI -accredited standards developers but not consortia.
7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.  

During FY 2002, the Commission's efforts to enhance voluntary safety standards development were complemented by the overall federal policy set forth in the Circular. There are no recommendations for changes in the Circular at this time.
8. Conformity assessment activities in which the agency was involved.  
No response.

9. Provide any examples or case studies of standards successes.

The CPSC staff provided technical support to the development of 14 new, revised, or reaffirmed voluntary consumer product safety standards, which were completed in FY 2002. The Commission had 28 employees directly participating in 60 voluntary standards development projects during FY 2002.

10. Comments.

The U.S. Consumer Product Safety Act (CPSA), as amended, requires the Commission to defer to issued voluntary standards, rather than promulgate mandatory standards, when the voluntary standards will eliminate or adequately reduce the risk of injury addressed and it is likely that there will be substantial compliance with the voluntary standards. In addition, the Commission is required, after any notice or advance notice of proposed rulemaking, to provide technical and administrative assistance to persons or groups who propose to develop or modify an appropriate voluntary standard. Additionally, the Commission is encouraged to provide technical and administrative assistance to groups developing product safety standards and test methods, taking into account Commission resources and priorities.

Since its inception in 1973, the Commission has promoted the development of voluntary product safety standards. Policy statements in support of voluntary standards were published by the CPSC in 1975 and 1978. These policy statements were updated in 1988 (16 U.S.C. 1031), and a staff directive on implementation of portions of these policy statements was promulgated in 1989 and updated in October 2001.

Since the principles set forth in the OMB Circular A-119 Rev. were published, the Commission has consistently supported them. The CPSC Voluntary Standards Coordinator, who also serves as the CPSC's Standards Executive for implementing OMB Circular A-119 Rev., provides general oversight for staff involvement in existing standards projects. The Voluntary Standards Coordinator establishes agency views on standards issues and decisions through Commission response to staff briefing packages and recommendations. These views are reflected in the Commission's Operating Plan and Budget. Coordinating participation within the Commission and with others in voluntary standards activities is a responsibility of the Voluntary Standards Coordinator.

Likewise, the Voluntary Standards Coordinator is responsible for meeting reporting requirements applicable to voluntary standards involvement of Commission staff.

## Environmental Protection Agency

The Environmental Protection Agency is pleased to submit the following report on the Agency's implementation of the NTTAA and the OMB Circular A-119. The reporting elements are listed below according to the format and guidance provided by NIST in the October 10, 2002, memorandum from the chair of the Interagency Committee on Standards Policy (ICSP).

1. Use of government-unique standards in lieu of existing and potentially applicable voluntary consensus standards.

In 75 separate considerations, EPA rejected 38 different voluntary consensus standards. Note, however, that EPA did not develop new, government unique standards but in each case chose an existing EPA method.

The following table provides the name of the standard rejected, the name of the government unique standard used and the reason for the rejection.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
164	ASTM D3154-00 - Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Methods 1, 2, 2C, 3, 3B, 4	This standard appears to cover EPA's Part 60 Methods 1, 2, 2C, 3, 3B, 4, but lacks in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and, (3) the frequency and validity range for calibration of the temperature sensors.
	ASTM D3464-96 (2001) - Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	The applicability specifications in this ASTM standard are not clearly defined, e.g., range of gas composition, temperature limits. In addition, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's ability to make a definitive comparison of the method in these areas.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 10780:1994 - Stationary Source Emissions - Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	ISO 10780:1994 recommends the use of an L-shaped pitot, which historically has not been recommended by EPA. The EPA specifies the S-type design that has large openings that are less likely to plug up with dust.
	ISO 10396:1993 - Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ISO 10396 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only). This standard is also very similar to ASTM D5835.
	ASTM D5835-95 - Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ASTM D5835-95 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms



Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
			of resolution (all types) and recording intervals (digital and analog recorders, only). This standard is also very similar to ISO 10396.
	CAN/CSA Z223.2-M86 (1986) - Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams	EPA Method 3A	This standard is unacceptable as a substitute for EPA Methods 3A, 6C, 7E, 10, 10A since it does not include quantitative specifications for measurement system performance, most notably the calibration procedures and instrument performance characteristics. The instrument performance characteristics that are provided are nonmandatory and do not provide the same level of quality assurance as the EPA methods. For example, the zero and span/calibration drift is only checked weekly, whereas the EPA methods requires drift checks after each run.
	ISO 12039:2001 - Stationary Source Emissions- Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen – Automated Methods		This ISO standard is unacceptable as substitute for EPA Method 3A because it is missing some key features. In terms of sampling, the hardware required by ISO 12039:2001 does not include a 3-way calibration valve assembly or equivalent to block the sample gas flow while calibration gases are introduced. In its calibration procedures, ISO 12039:2001 only specifies a two-point calibration while EPA Method 3A specifies a three-point calibration. In addition, ISO 12039:2001 does not specify performance criteria for calibration error, calibration drift, or sampling system bias tests, as in the EPA method, although checks of these quality control features are required by the ISO standard.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 14965:2000(E) - Air Quality - Determination of Total Nonmethane Organic Compounds - Cryogenic Preconcentration and Direct Flame Ionization Method	EPA Methods 25, 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 10-ppm carbon. A method whose upper limit is 10-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
	EN 12619 (1999) - Stationary Source Emissions- Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases- Continuous Flame Ionization Detector Method	EPA Method 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 40-ppm carbon. A method whose upper limit is 40-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
186	ASTM D3154-00 - Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Methods 1, 2, 2C, 3B, 4	This standard appears to cover EPA's Part 60 Methods 1, 2, 2C, 3, 3B, 4, but lacks in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.
	ASTM D3464-96 (2001) - Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	The applicability specifications in this ASTM standard are not clearly defined, e.g., range of gas composition, temperature limits. In addition, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
			ability to make a definitive comparison of the method in these areas.
	ISO 10780:1994 - Stationary Source Emissions - Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	ISO 10780:1994 recommends the use of an L-shaped pitot, which historically has not been recommended by EPA. The EPA specifies the S-type design that has large openings that are less likely to plug up with dust.
	ASTM D6060-96 (in review 2000) - Practice for Sampling of Process Vents with a Portable Gas Chromatography	EPA Method 18	This standard lacks key quality control and assurance that is required for EPA Method 18. For example: lacks acceptance criteria for calibration, details on using other collection media (e.g. solid sorbents), and reporting/ documentation requirements.
	ISO 14965:2000(E) - Air Quality - Determination of Total Nonmethane Organic Compounds - Cryogenic Preconcentration and Direct Flame Ionization Method	EPA Methods 25 and 25A	This standard is an impractical alternative to EPA Method 25 and 25A because it does not measure solvent process vapors in concentrations greater than 10-ppm carbon. A method whose upper limit is 10-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
	EN 12619 (1999) - Stationary Source Emissions- Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases- Continuous Flame Ionization Detector Method	EPA Method 25 and 25A	This standard is an impractical alternative to EPA Method 25 and 25A because it does not measure solvent process vapors in concentrations greater than 40-ppm carbon. A method whose upper limit is 40-ppm carbon has a measurement range too limited to be useful in measuring source emissions.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ASTM D6348-98 - Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy	EPA Method 320	This ASTM standard has been reviewed by the EPA and comments were sent to ASTM. The ASTM Subcommittee D22-03 is now undertaking a revision of ASTM D6348-98. Upon successful ASTM balloting and demonstration of technical equivalency with the EPA FTIR methods, the revised ASTM standard could be incorporated by reference for EPA regulatory applicability.
202	ASTM D3154-00 - Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Methods 1, 2, 2C, 3, 3B, 4	This standard appears to cover EPA's Part 60 Methods 1, 2, 2C, 3, 3B, 4, but lacks in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.
	ISO 10780:1994, Stationary Source Emissions-- Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	ISO 10780:1994 recommends the use of L-shaped pitots, which historically have not been recommended by EPA. EPA specifies the use of S-type design that has large openings that are less likely to plug up with dust.
	ASTM D3464-96 (2001), Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	There is no EPA method for comparison. Applicability specifications are not clearly defined (example: range of gas composition, T limits). It appears to have the correct calibration procedures and specifications, but without supporting data. Some of the variability issues were not adequately addressed. The EPA cannot call this equivalent to EPA Method 2 without supporting data.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ASTM D5835-95, Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ASTM D5835-95 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only). This standard is also very similar to ISO 10396.
	ISO 10396:1993, Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ISO 10396 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only). This standard is also very similar to ASTM D5835.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	EN 12619:1999 Stationary Source Emissions- Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases-- Continuous Flame Ionization Detector Method	EPA Method 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 40-ppm carbon. A method whose upper limit is 40-ppm carbon has a measurement range too limited to be useful in measuring source emissions, which are expected to be higher.
	ISO 14965:2000(E) Air Quality- Determination of Total Nonmethane Organic Compounds- Cryogenic Preconcentration and Direct Flame Ionization Method	EPA Method 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 10-ppm carbon. A method whose upper limit is 10-ppm carbon has a measurement range too limited to be useful in measuring source emissions, which are expected to be higher.
	ASTM D3796-90 (Reapproved 1998), Standard Practice for Calibration of Type S Pitot Tubes	EPA Method 2	This is a very good detailed procedure for calibrating Type S pitot tubes, but it is not a complete method alternative to EPA Method 2.
	ASME C00031 or PTC 19-10-1981-- Part 10, Flue and Exhaust Gas Analyses	EPA Method 3	Too broad to be useful in regulatory sense. Covers EPA Methods 3, 6, 7, and 15 with variants.
	CAN/CSA Z223.2-M86(1986), Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed	EPA Method 3A	Too general. This standard lacks in detail and quality assurance/quality control requirements. Appendices with valid quality control information are not a required part of the standard.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	Combustion Flue Gas Streams		
	ASTM E337-84 (Reapproved 1996), Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures)	EPA Method 4	This will only cover a small portion of what is acceptable for EPA Method 4.
265	ASTM D3154-00 - Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Methods 1, 2, 2C, 3, 3B, 4	Lacks in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.
	ASTM D3464-96 (2001) - Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	The applicability specifications in this ASTM standard are not clearly defined, e.g., range of gas composition, temperature limits. In addition, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's ability to make a definitive comparison of the method in these areas.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 10396:1993 - Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations	EPA Method 3A	But lacks in detail and quality assurance/quality control requirements. Specifically, ISO 10396 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only).
	ASTM D5835-95 - Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration	EPA Method 3A	Lacks in detail and quality assurance/quality control requirements. Specifically, ASTM D5835-95 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only).



Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	CAN/CSA Z223.2-M86 (1986) - Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams	EPA Method 3A	It does not include quantitative specifications for measurement system performance, most notably the calibration procedures and instrument performance characteristics. The instrument performance characteristics that are provided are nonmandatory and do not provide the same level of quality assurance as the EPA methods. For example, the zero and span/calibration drift is only checked weekly, whereas the EPA methods requires drift checks after each run.
	ISO 12039:2001 - Stationary Source Emissions- Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen - Automated Methods	EPA Method 3A	This ISO standard is unacceptable as substitute for EPA Method 3A because it is missing some key features. In terms of sampling, the hardware required by ISO 12039:2001 does not include a 3-way calibration valve assembly or equivalent to block the sample gas flow while calibration gases are introduced. In its calibration procedures, ISO 12039:2001 only specifies a two-point calibration while EPA Method 3A specifies a three-point calibration. In addition, ISO 12039:2001 does not specify performance criteria for calibration error, calibration drift, or sampling system bias tests, as in the EPA method, although checks of these quality control features are required by the ISO standard.
	ASTM D4323-84 (1997) - Standard Test Method for Hydrogen Sulfide in the Atmosphere by Rate of Change of Reflectance	EPA Method 15	This standard is not acceptable as an alternative to EPA Method 15 since it only applies to concentrations of H <sub>2</sub> S from 1 ppb to 3 ppm without dilution, which is likely to be lower than the levels at source conditions. In addition, many quality control items are missing in ASTM D4323, such as checks for calibration drift and sample line losses. The calibration curve is also determined with only one point, as opposed to a multi-point curve of EPA Method 15.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ASTM D6060-96 (in review 2000) - Practice for Sampling of Process Vents with a Portable Gas Chromatography	EPA Method 18	This standard lacks key quality control and assurance that is required for EPA Method 18. For example: lacks acceptance criteria for calibration, details on using other collection media (e.g. solid sorbents), and reporting/ documentation requirements.
	ASTM E1211-97 - Standard Practice for Leak Detection and Location Using Surface-Mounted Acoustic Emission Sensors	EPA Method 21	This standard will detect leaks but not “classify” the leak as VOC, as in EPA Method 21. In addition, in order to detect the VOC concentration of a known VOC leak, the acoustic signal would need to be calibrated against a primary instrument. Background noise interference in some source situations could also make this standard difficult to use effectively.
	ISO 14965:2000(E) - Air Quality - Determination of Total Nonmethane Organic Compounds - Cryogenic Preconcentration and Direct Flame Ionization Method	EPA Methods 25, 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 10-ppm carbon. A method whose upper limit is 10-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
	EN 12619 (1999) - Stationary Source Emissions- Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases- Continuous Flame Ionization Detector Method	EPA Method 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 40-ppm carbon. A method whose upper limit is 40-ppm carbon has a measurement range too limited to be useful in measuring source emissions.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 10780:1994 - Stationary Source Emissions - Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	ISO 10780:1994 recommends the use of an L-shaped pitot, which historically has not been recommended by EPA. The EPA specifies the S-type design that has large openings that are less likely to plug up with dust.
273	ASTM D3154-00, Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Methods 1, 2, 2C, 3, 3B, 4	This standard appears to cover EPA's Part 60 Methods 1, 2, 2C, 3, 3B, 4, but lacks in quality control and quality assurance requirements. Specifically, ASTM D3154-00 does not include the following: (1) proof that openings of standard pitot tube have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (e.g., magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.
	ASTM D3464-96 (2001), Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	The applicability specifications in this ASTM standard are not clearly defined, e.g., range of gas composition, temperature limits. In addition, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit EPA's ability to make a definitive comparison of the method in these areas.
	ISO 10780:1994, Stationary Source Emissions- Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	ISO 10780:1994 recommends the use of an L-shaped pitot, which historically has not been recommended by EPA. The EPA specifies the S-type design that has large openings that are less likely to plug up with dust.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	EN 12619:1999 Stationary Source Emissions- Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases Continuous Flame Ionization Detector Method	EPA Method 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 40-ppm carbon. A method whose upper limit is 40-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
	ISO 14965: 2000(E) Air Quality- Determination of Total Nonmethane Organic Compounds- Cryogenic Preconcentration and Direct Flame Ionization Method	EPA Methods 25, 25A	This standard is an impractical alternative to EPA Method 25A because it does not measure solvent process vapors in concentrations greater than 10-ppm carbon. A method whose upper limit is 10-ppm carbon has a measurement range too limited to be useful in measuring source emissions.
	CAN/CSA Z223.2-M86 (1986), Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams	EPA Method 3A	This standard is unacceptable as a substitute for EPA Methods 3A, 6C, 7E, 10, 10A since it does not include quantitative specifications for measurement system performance, most notably the calibration procedures and instrument performance characteristics. The instrument performance characteristics that are provided are nonmandatory and do not provide the same level of quality assurance as the EPA methods. For example, the zero and span/calibration drift is only checked weekly, whereas the EPA methods requires drift checks after each run.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ASTM D5835-95, Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ASTM D5835-95 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only)
	ISO 10396:1993, Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations	EPA Method 3A	Similar to EPA Methods 3A, 6C, 7E, 10, ALT 004, CTM 022, but lacks in detail and quality assurance/quality control requirements. Specifically, ISO 10396 does not include the following: (1) sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only).

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 12039:2001, Stationary Source Emissions Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen Automated Methods	EPA Method 3A	This ISO standard is unacceptable as substitute for EPA Method 3A because it is missing some key features. In terms of sampling, the hardware required by ISO 12039:2001 does not include a 3-way calibration valve assembly or equivalent to block the sample gas flow while calibration gases are introduced. In its calibration procedures, ISO 12039:2001 only specifies a two-point calibration while EPA Method 3A specifies a three-point calibration. In addition, ISO 12039:2001 does not specify performance criteria for calibration error, calibration drift, or sampling system bias tests, as in the EPA method, although checks of these quality control features are required by the ISO standard.
376	ASTM D3154 -91 (1995) -Standard Method for Average Velocity in a Duct (Pitot Tube Method)	EPA Method 1, 2, 2c 3, 3b, 4	Appears to cover EPA's Part 60 Methods 1, 2, 2c, 3, 3b, 4, but lacks in quality control and quality assurance requirements.
	ISO 9096:1992 - Determination of Concentration and Mass Flow Rate of Particulate Matter in Gas Carrying Ducts - Manual Gravimetric Method.	EPA Method 1, 2, 5	Some portions of this method relate to EPA Methods 1 & 2. This method will not produce particulate matter measurements like EPA Method 5 (example: there is no temperature control on the filter that is exposed to ambient levels). There is no EPA Method to compare this to. EPA cannot approve this method without supporting data.
	ISO 10155:1995 - Stationary Source Emissions Automated Monitoring of Mass Concentration of Particles – Performance Characteristics, Test Methods, and Specifications.	EPA Performance Specification 11	This international standard is only applicable on a site-specific basis by direct correlation with the manual method ISO 9096 (which does not produce particulate matter measurements like EPA Method 5). This appears to be a particulate matter (PM) CEMS performance specification similar to EPA Performance Specification (PS) 11, but does not contain detailed RATA procedures. In addition, EPA does not have a final performance specification

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
			to compare this to.
	ASTM D3464-96 - Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer	EPA Method 2	There is no EPA Method to compare this to. Applicability specifications are not clearly defined (example: range of gas composition, T limits). It appears to have the correct calibration procedures and specifications, but without supporting data. Some of the variability issues were not adequately addressed. EPA cannot call this equivalent to EPA Method 2 without supporting data.
	ASTM D3796 - 98 - Standard Practice for Calibration of Type S Pitot Tubes	EPA Method 2	This is a very good detailed procedure for calibrating Type S pitot tubes, but it is not a complete method alternative to EPA Method 2.
	ISO 10780:1994 – Stationary Source Emissions – Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts	EPA Method 2	This standard recommends the use of L-shaped pitots, although it contains procedures for the use of S-shaped pitots, as in EPA Method 2. ISO 10780 has good detail, but has significant deficiencies, e.g., 1) the distance between each leg of the pitot to its face-opening plane can be up to 10 times the external tubing diameter vs. 1.5 times as specified in EPA Method 2; and 2) no direct calibration procedures are provided for an S-shaped pitot.
	ASME C00031 or PTC 19-10-1981 - Part 10 Flue and Exhaust Gas Analyses	EPA Method 3, 6, 7, 15	Too broad to be useful in regulatory sense. Covers Methods 3, 6, 7, and 15 with variants.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 10396:1993 - Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations	EPA Method 3a, 6c, 7e, 10, ALT 004, CTM 022	Duplicates Method 3a, 6c, 7e, 10, ALT 004, CTM 022. Lacks in detail and quality assurance and quality control requirements. Similar to ASTM D5835.
	ASTM D5835-95 - Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration.	EPA Method 3a, 6c, 7e, 10, ALT 004, CTM 022	Similar to Methods 3a, 6c, 7e, 10, ALT 004, CTM 022. Lacks in detail and quality assurance and quality control requirements. Very similar to ISO 10396.
	CAN/CSA Z223.2-M86 - (1986) Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams	EPA Method 3a, 6c, 7e, 10, 10a	Too general. This standard lacks in detail and quality assurance/quality control requirements. Appendices with valid quality control information are not a required part of this method.
	ASTM E337- 84 (Reapproved 1996) - Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures)	EPA Method 4	This will only cover a small portion of what is acceptable for EPA Method 4.



Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 7934:1998 - Stationary Source Emissions - Determination of the Mass Concentration of Sulfur Dioxide - Hydrogen Peroxide/Barium Perchlorate/ Thorin Method	EPA Method 6	This standard is only applicable to sources with 30 mg/m <sup>3</sup> SO <sub>2</sub> or more. In addition, this method does not separate SO <sub>3</sub> from SO <sub>2</sub> as does EPA Method 6; therefore, this method is not valid if more than a negligible amount of SO <sub>3</sub> is present. Also, does not address ammonia interferences.
	ISO 11632:1998 - Stationary Source Emissions - Determination of the Mass Concentration of Sulfur Dioxide - Ion Chromatography	EPA Method 6	No comparable EPA method that includes ion chromatography. Sampling procedure similar to EPA Method 6, but lacks in detail and QC procedures, such as calibration checks and leaks tests.
	CAN/CSA Z223.21-M1978 Method for the Measurement of Carbon Monoxide: 3 - Method of Analysis by Non-Dispersive Infrared Spectrometry	EPA Method 10, 10a	In general, this standard lacks in detail and quality assurance/quality control requirements. In specific, this
	ASTM D4358-94 (1999) - Standard Test Method for Lead and Chromium in Air Particulate Filter Samples of Lead Chromate Type Pigment Dusts by Atomic Absorption Spectroscopy	EPA Method 12, 29, 306, 306a	This MACT standard (Petroleum Refineries) only cites Method 29. Therefore, the following EPA comment is only applicable for Method 29 not Method 12 and 306: Method 29 requires the use of hydrofluoric acid (HF) in its process of digestion of the sample. ASTM D4358-94 (1999) does not require the use of HF; therefore, it cannot be used in the preparation, digestion, and analysis of Method 29 samples. Additionally, Method 29 requires the use of a glass fiber filter, whereas the subject ASTM standard requires cellulose filters and other probable non-glass fiber media, and this further negates their use as Method 29 equivalent

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
			methods. (Same comment as provided for ASTM E1741 and ASTM E1979)
	ASTM E1741-95 Standard practice for Preparation of Airborne Particulate Lead Samples Collected During Abatement and Construction Activities for Subsequent Analysis by Atomic Spectrometry	EPA Method 12, 29	This MACT standard (Petroleum Refineries) only cites Method 29. Therefore, the following EPA comment is only applicable for Method 29 not Method 12 and 306: Method 29 requires the use of hydrofluoric acid (HF) in its process of digestion of the sample. ASTM E1741-95 does not require the use of HF; therefore, it cannot be used in the preparation, digestion, and analysis of Method 29 samples. Additionally, Method 29 requires the use of a glass fiber filter, whereas the subject ASTM standard requires cellulose filters and other probable non-glass fiber media, and this further negates their use as Method 29 equivalent methods. (Same comment as provided for ASTM D4358 and ASTM E1979.)
	ASTM E1979-98 - Standard Practice for Ultrasonic Extraction of Paint, Dust, Soil, and Air Samples for Subsequent Determination of Lead	EPA Method 12, 29	This MACT standard (Petroleum Refineries) only cites Method 29. Therefore, the following EPA comment is only applicable for Method 29 not Method 12 and 306: Method 29 requires the use of hydrofluoric acid (HF) in its process of digestion of the sample. ASTM E1979-98 does not require the use of HF; therefore, it cannot be used in the preparation, digestion, and analysis of Method 29 samples. Additionally, Method 29 requires the use of a glass fiber filter, whereas the subject ASTM standard requires cellulose filters and other probable non-glass fiber

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
			media, and this further negates their use as Method 29 equivalent methods. (Same comment as provided for ASTM D4358 and ASTM E1741.)
	ASTM D4323-84 (1997) - Standard Test Method for Hydrogen Sulfide in the Atmosphere by Rate of Change of Reflectance	EPA Method 15	ASTM D4323 only applies to concentrations of H <sub>2</sub> S from 1 ppb to 3 ppm without dilution. Many QC items are missing, such as calibration drift and sample line losses. The calibration curve is determined with only one point.
	EN 12619:1999- Stationary Source Emissions - Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases - Continuous Flame Ionization Detector Method	EPA Method 25a	This standard is limited because it does not apply to solvent-using processes vapors or concentrations >40 ppm carbon. Specifications for probe temperature are only 20°C above flue gas as compared to EPA Method 25a which specifies greater than or equal to 110°C.
	EN 1911-1,2,3:1998 -Stationary Source Emissions- Manual Method of Determination of HCl - Part 1: Sampling of Gases Ratified European Text - Part 2: Gaseous Compounds Absorption Ratified European Text -	EPA Method 26, 26a	Part 3 of this method cannot be considered equivalent to Method 26 or 26A. The sample absorbing solution (water) would be expected to capture both HCl and chlorine gas, if present, without the ability to distinguish between the two. Methods 26 and 26A use an acidified absorbing solution to first separate HCl and chlorine gas so that they can be selectively absorbed, analyzed, and reported separately. In addition, the efficiency of absorbing the chlorine gas fraction would be expected to vary as the pH of the

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	Part 3: Adsorption Solutions Analysis and Calculation Ratified European Text		absorbing solution changed.
	CAN/CSA Z223.26-M87 - Measurement of Total Mercury in Air Cold Vapour Atomic Absorption Spectrophotometric Method	EPA Method 29, 101, 101a	Method is only applicable to background and near ambient levels of mercury (5 - 5,000 ng/m3) and for low volume air sampling. QA is limited and/or not well documented.
	ASTM D6216 - 98 - Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications.	EPA Performance Specification 1	The EPA is incorporating ASTM D6216 (manufacturers certification) by reference into EPA Performance Specification 1, Sect. 5 & 6 in another rulemaking. ASTM D6216 does not address all the requirements specified in PS-1.
	ISO 7935:1992 - Stationary Source Emissions - Determination of the Mass Concentration of Sulfur Dioxide - Performance Characteristics of Automated Measuring Methods	EPA Performance Specification 2 (for the sulfur dioxide portion only)	This standard lacks in detail and quality assurance/quality control requirements. Method is missing calibration drift requirements and specifications for placement of CEMS. Limited concentration range of applicability.

Rule #	Voluntary Standards Rejected	Government Standards Used	Explanation
	ISO 10849:1996 - Determination of the Mass Concentration of Nitrogen Oxides - Performance Characteristics of Automated Measuring Systems	EPA Performance Specification 2 (for the nitrogen oxide portion only)	This standard lacks in detail and quality assurance/quality control requirements. Method is missing calibration drift requirements and specifications for placement of CEMS. Limited concentration range of applicability.
	ASTM C1111- 98 (1998) - Standard Test Method for Determining Elements in Waste Streams by Inductively Coupled Plasma-Atomic Emission Spectrometers	SW846-6010b	This standard lacks details for instrument operation QA/QC, such as optimizing plasma operating conditions; upper limit of linear dynamic range; spectral interference correction; and calibration procedures, which include initial and continuous calibration verifications. Also lacks internal standard and method of standard addition options for samples with interferences.
	ASTM D6349-99 (1999) - Standard Test Method for Determining Major and Minor Elements in Coal, Coke, and Solid Residues from Combustion of Coal and Coke by Inductively Coupled Plasma-Atomic Emission Spectrometers	SW846-6010b	This standard lacks details for instrument operation QA/QC, such as optimizing plasma operating conditions, upper limit of linear dynamic range, spectral interference correction, and calibration procedures, that include initial and continuous calibration verifications. Also lacks details for standard preparation, and internal standard and method of standard addition options for samples with interferences.
520	ISO 14520, Gaseous Media & Fixed Fire Extinguishing	None	N/A

2. Voluntary consensus standards substituted for government unique standards.

2

EPA used ASTM D6420-99 standard as a substitute for EPA Method 18 in two separate rules, for two separate applications.

3. Number of voluntary consensus standards used in this reporting period.

9

During this period, nine different voluntary consensus standards were used in 15 separate decisions. In decisions where the same standard appears in more than one application, but for essentially the same purpose, the use of the standard was counted only once.

4. Number of employees participating in voluntary consensus organizations.

42

During this period there were 42 EPA employees actively participating in voluntary standards activities. Some of these, plus three others from the Agency, also participated in standards activities in the "C" category below in response to question five.

5. EPA employees participate in the following standardization organizations:

A. U.S. National Standardization and Conformity Assessment Organizations:

<u>ACRONYM</u>	<u>BODY</u>
ANSI	American National Standards Institute
RAB	Registrar Accreditation Board

B. Standards Development Organizations:

<u>ACRONYM</u>	<u>BODY</u>
ACS	American Chemical Society
AOAC	Association of Analytical Communities International
ASTM	ASTM International
ASME	American Society of Mechanical Engineers
ASQ	American Society for Quality
AWWA	American Water Works Association
ISO	International Organization of Standardization
IEC	International Electrotechnical Committee
NFPA	National Fire Protection Association
NSF International (No acronym)	National Fire Protection Association International Standard Methods
WEF	Water Environment Federation
W3C	World Wide Web Consortium

C. Other private sector and government organizations with activities in standards and conformity assessment:

<u>ACRONYM</u>	<u>BODY</u>
NELAC	National Environmental Laboratory Accreditation Council
MARLAP	Multi-Agency Radiological Laboratory Analytical Protocols
FGDC	Federal Geographic Data Committee
EDSC	Environmental Data Standards Council
APBF	American Petroleum Business Federation
APHA	American Pharmocopia Association Eco-RBCA
Open-GIS	Open GIS Consortium.

6. Description of how EPA reports use of standards:
  - a. EPA reports each time a separate regulatory decision involves use of a technical standard and thereby triggers consideration of using an existing voluntary standard.
  - b. The use of standards varies according to the purpose of a given regulation. It may be that a regulation in one part of the Agency would use an edition of a standard that is separate from the use of the same standard, different edition, in another part of the Agency. In the event that such a situation would occur, the two would be counted as two separate uses of the same standard. It is not known that this situation has occurred, but there is no policy to prevent it from occurring.
  - c. EPA has not ‘counted’ standards used for guidance purposes, but would consider doing so in cases where the guidance is deemed a regulatory activity. The Agency has typically included such uses in the annual reports under the “other activities” section. EPA would welcome discussion of this question within the Interagency Committee for Standards Policy.
  - d. The majority of voluntary standards used by EPA are from ANSI-accredited organizations, and EPA, as a member of ANSI, values the accreditation role of ANSI, the U.S. national standards body. However, since the focus of the Agency is on the use of standards developed outside the government-unique processes, EPA does not prohibit the use of standards developed in consortia, and EPA would count such standards in the “number of standards used” category for annual reporting purposes.
7. (See comment below.)
8. Not applicable.
9. EPA has a number of good case studies from various offices throughout the Agency. These and examples from other years will be posted on the new EPA voluntary standards Web site soon to be available.

10. Comments.

EPA appreciates the accomplishments and efforts of NIST in coordinating federal obligations under the NTTAA and OMB Circular. NIST performs a particularly helpful role as chair of the Interagency Committee on Standards Policy (ICSP), and in providing written and oral guidance on the preparation of the annual reports to OMB and Congress.

With a view toward making the annual report on federal adherence to the NTTAA possibly more useful to the federal agencies themselves, to standards development organizations with which agencies work, and to the public, EPA offers the following brief comment for consideration by all stakeholders as appropriate.

It is almost overwhelmingly compelling, and understandably so, to want to compile standards-related data from across the federal agencies and enumerate the data in tables. As strong as that urge is, tables may not reflect an accurate or useable 'picture' for all types of data. In that case, it is helpful to understand why -- what data may be suitable for tabulation and what information should be presented in another format.

If there is any thought to either revising the Circular or providing additional guidance on reporting, it may be beneficial to take a fresh look at the intent of the law and how it impacts not only federal agencies but other stakeholders as well, specifically: standards development organizations (SDOs) and the public. Given the language of the NTTAA itself, what kind of information would be useful and useable for these groups? For example: what information is most helpful to standards organizations? SDOs could be surveyed, possibly using ANSI as a mechanism for that. It is conceivable that SDOs may find numbers-only information not very useful and would prefer another format to determine if there are common or reoccurring reasons why VCSs are not used, so that committees have better knowledge of agencies needs.

On the other hand, it may be most helpful for SDOs to continue to have tabulated numbers of agency participants as an indicator of how well the SDOs are doing themselves in reaching out to potential federal actors.

EPA is not suggesting a specific answer, and is posing this consideration with the sense that a revision of the Circular itself may not be needed to accomplish a fresh look at the matter.

In any event and in keeping with the mission of EPA, the Agency remains committed to working cooperatively with NIST and the other ICSP members in implementation of the NTTAA and OMB Circular.



## Federal Communications Commission

1. Number of government-unique standards used in lieu of voluntary consensus standards.  
0
2. Number of voluntary consensus standards substituted for government-unique standards.  
0
3. Number of voluntary consensus standards used in FY 2002.  
0
4. Number of agency employees participating in voluntary consensus standards activities.  
5
5. List of voluntary consensus standards bodies in which there is agency participation.  
7
6. How does your agency report the use of standards?
  - a. Does your federal agency report only the first-time use of standards, continued uses of standards or both first time and continued use?  
  
Both first time and continued use of standards.
  - b. When reporting standards use, some agencies report uses of standards. That is, they count the total number of instances where the agency has referenced a standard. For example, three separate references to a single standard are counted as three standards uses. On the other hand, other agencies report standards used. These agencies report the number of standards that the agency references. In this case, each standard is counted only once regardless of how many times it is referenced by the agency. Using these definitions, how does your agency report?  
  
No comment.
  - c. Does your federal agency report multiple editions of a single standard as one standard or as multiple standards used?  
  
Multiple.

d. Does your federal agency report standards that it uses for guidance purposes (as opposed to compliance purposes)?

Yes.

e. Does your federal agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Yes.

7. Provide an evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

The policies of Circular A-119 are clearly stated for application to the activities of the FCC, and the Commission recognizes the benefit of using voluntary consensus standards when applicable.

8. Provide the conformity assessment activities in which the agency has been involved.

None.

9. Provide any examples or case studies of standards successes.

No comment.

10. Comments.

The Web-based procedure for reporting works well.

**Federal Emergency Management Agency**

No report.

## Federal Trade Commission

1. Number of government-unique standards used in lieu of voluntary consensus standards.  
0
2. Number of voluntary consensus standards substituted for government-unique standards.  
0
3. Number of voluntary consensus standards used in FY 2002.  
0
4. Number of agency employees participating in voluntary consensus standards activities.  
0
5. List of voluntary consensus standards bodies in which there is agency participation.  
Not applicable.
6. How does your agency report the use of standards?
  - a. Does your federal agency report only the first-time use of standards, continued uses of standards or both first time and continued use?  
Not applicable.
  - b. When reporting standards use, some agencies report uses of standards. That is, they count the total number of instances where the agency has referenced a standard. For example, three separate references to a single standard are counted as three standards uses. On the other hand, other agencies report standards used. These agencies report the number of standards that the agency references. In this case, each standard is counted only once regardless of how many times it is referenced by the agency. Using these definitions, how does your agency report?  
Not applicable.
  - c. Does your federal agency report multiple editions of a single standard as one standard or as multiple standards used?  
Not applicable.

- d. Does your federal agency report standards that it uses for guidance purposes (as opposed to compliance purposes)?

Not applicable.

- e. Does your federal agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

Not applicable.

7. Provide an evaluation of the effectiveness of Circular A-119 Policy and recommendations for any changes.

See response to question 10.

8. Provide the conformity assessment activities in which the agency has been involved.

See response to question 10.

9. Provide any examples or case studies of standards successes.

See response to question 10.

10. Comments.

The Federal Trade Commission is an independent agency of the United States Government charged with enforcing competition and consumer protection laws. The Commission's only contact with voluntary consensus standards and the organizations that produce them is in connection with the enforcement of the Federal Trade Commission Act, which prohibits unfair methods of competition and unfair or deceptive acts or practices affecting commerce. The Commission does not promulgate its own standards or engage in other standards activities pertinent to OMB Circular A-119.

## General Services Administration

1. As required by P.L. 104-113, you must highlight all instances where the agency used government-unique standards in lieu of voluntary consensus standards during FY 2002. For each instance, you must identify the specific government-unique standard used and the voluntary consensus standard that was not selected. Equally as important, you must clearly state your agency's rationale for such use.

2

- |    |                            |   |
|----|----------------------------|---|
| A. | <u>Government Standard</u> | A-A1925   |
|    | <u>Voluntary Standard</u>  | ASTM E488   |
|    | <u>Rationale</u>           | This government-unique standard (A-A-1925) is prepared maintained by the Defense Logistics Agency (DLA). Both the DLA and the General Services Administration (GSA) procure products that reference A-A-1925. In order to maintain product continuity across the federal marketplace, we must cite the same standard (A-A-1925) as DLA. |
| B. | <u>Government Standard</u> | KKK-1822E   |
|    | <u>Voluntary Standard</u>  | ASTM F-2020-1   |
|    | <u>Rationale</u>           | The GSA's use of the ASTM standard is under review. The GSA has requested the Ambulance Manufacturers Division (AMD) to perform a technical review of the ASTM standard. The final AMD report should be completed by the third quarter of 2003.   |

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

19

<u>Government standard</u>	<u>Voluntary standard</u>
A-A-3053	ASTM D4317
A-A-2336	MPI 5 or 7
A-A-2962	MPI 51, 47, 48 or 49

A-A-3067	MPI 8, 9, or 94
A-A-2246	MPI 138, 141, 114 or 139
A-A-3108	MPI 28
FED-STD-751	ASTM D6193
PPP-B-636	ASTM D1974
PPP-B-636	ASTM D5118
MIL-25135	SAE/AMS 2644
A-A-870	ASTM D3306
A-A-870	ASTM D4340
A-A-870	ASTM D4985
A-A-895	ASTM D456
O-S-571	ASTM D458
O-S-576	ASTM D928
O-T-236	ASTM D4081
O-C-114	ASTM E1229
A-A-1106	UL 154

3. The number of voluntary consensus standards that your agency used during FY 2002, based upon procedures set forth in sections 11 and 12 of the Circular.

81

4. The number of agency employees participating in voluntary consensus standards activities during this period.

44

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

23

American Society for Testing and Materials (ASTM)  
American National Standards Institute (ANSI)  
Business and Institutional Furniture Manufacturers Association (BIFMA)  
Underwriters Laboratories (UL)  
Hardwood Plywood and Veneer Association (HPVA)  
Aerospace Industries Association (AIA)  
American Society of Mechanical Engineers (ASME)  
National Institute for Building Sciences (NIBS)  
Performance Review Institute (PRI)  
National Aerospace and Defense Contractors Accreditation Program (NADCAP)  
Society of Automotive Engineers (SAE)  
Society for Protective Coatings (SSPC)  
International Standards Organization (ISO) SC29/TC10 Hand Tools Committee

American Gas Association (AGA)  
Automotive Lift Institute (ALI)  
Builders Hardware Manufacturers Association (BHMA)  
National Fire Protection Association (NFPA)  
The Maintenance Council of American Trucking Associations (TMC/ATA)  
Ambulance Manufacturers Division, National Truck Equipment Associations  
(AMD/NTEA)  
National Fire Protection Association [1901] (NFTA)  
National Fire Protection Association – National Electrical Code (NFTA-NEC)  
American Society for Mechanical Engineers (ASME) Safety Standards for Portable  
Lifting Devices (PALD)  
American Society of Refrigerating and Air-Conditioning Engineers (ASHRAE)  
National Building Codes

6. A description of how your agency currently reports its use of voluntary consensus standards. Specifically, you should answer the following questions. (Note: Questions will be structured on the web entry database to accept either “Yes/No” or multiple-choice responses.)

The GSA reports:

- a. both first-time and continued use of standards,
  - b. the total number of standards used,
  - c. multiple editions of a single standard as one standard used,
  - d. no response, and
  - e. the use of standards from non-ANSI-accredited standards developers including industry consortia.
7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

None.

8. Any conformity assessment activities in which your agency has been involved in the reporting period as described in the *Federal Register*, Vol. 65, No. 155, Thursday, August 10, 2000, Guidance on Federal Conformity Assessment Activities.

Yes. They are as follows:



## ISO SC 10 TC 29

The U.S. Technical Advisory Group (TAG) is responsible for determining the U.S. position on IEC/ISO standards pertaining to technical committee or subcommittees in addition to the review of policy matters. The standards include hand tools and accessories for safety requirements relating to the elements of design, use, and selection of performance, tolerances, and outline configurations including, but not limited to, wrenches, pliers, screwdrivers, shears, punches, chisels, hammers, and toolboxes. The standards will include the development of requirements, the consideration of various types and classes of hand tools and accessories required for specified classes of service, and the tests needed to determine conformance with the service classification requirements.

## ASME, American Society of Mechanical Engineers, B107 Main Committee

GSA Hardware SuperStore is a member of the ASME B107 main committee relating to hand tools and actively participates in the development of non-government procurement and safety standards. This committee is actively is actively involved in maintaining and improving standards to assure customer requirement are maintained.

## Tool Fastener Working Group

To discuss the standardization and end use relationship between fasteners and hand tools. By active participation from: the GSA, the Federal Supply Service (FSS) Hardware SuperStore, the Defense Industrial Center, Philadelphia, non-government standards activities (AIA, SAE, and ASME), fasteners and tool manufactures, designers, and end users. Fastener and hand tools are an integrated system where the goal of this group is to improve the performance of fastener systems by evaluating at the tool-fastener interface, in addition to creating a review committee to evaluate and improve non-government standards.

## Green Seal

Green Seal is an independent, non-profit “third party certification” organization devoted to the creation of scientific evaluation criteria for environmentally preferred products. These criteria are then used to provide credible objective, and unbiased product review. 6FEE continues to provide suppliers with the option of certifying their products with Green Seal. Also, a list of relevant Green Seal standards and Green Seal recommended products is maintained the GSA Hardware SuperStore Web page under “Environmental Issues.”

<http://www.greenseal.org/>  
<http://r6.gsa.gov/fss/hac/>

National Institute of Building Sciences (NIBS)  
Master Painters Institute (MPI)  
Scientific Certification Systems (SCS)

6FEE continues to provide suppliers with the option of certifying their products under the SCS Specification for Architectural and Anti-Corrosive Paint. This was a joint effort by the National Institute of Building Sciences (NIBS), the Master Painters Institute (MPI), ICI paint, the Department of Defense, the General Services Administration, the Chemical Manufacturers' Association, and the Scientific Certification Systems. This criteria is based on International Organization for Standardization (ISO) Standard 14042, as prepared by Technical Committee ISO/TC 207, Environmental Management, Subcommittee SC 5, Life Cycle Assessment and has been adopted as a standard by MPI. In addition, a copy of this standard and a list of SCS Certified products are maintained on the GSA Hardware SuperStore Web page under "Environmental Issues."

<http://www.scs1.com>.  
<http://www.hvacmall.com/listing/nibs.htm>

Clean Air Act National Emission Standards for Hazardous Air Pollutants (CAA NESHAP) Compliance – for Shipbuilding and Aerospace Coatings

The Clean Air Act (40<sup>th</sup> Code of Federal Regulations, Subparts 63.741, 63.753 and 63.780) designates "Shipbuilding and Ship Repair Facilities" and "Aerospace Manufacturing and Rework Facilities" as regulated emissions source categories. Clean Air Act rules limit the volatile organic hazardous air pollutant (VOHAP) content of several types of solvents, coatings, strippers, and maskants used within these industrial categories. Compliance is based on proper documentation that volatile organic compound (VOC) or VOHAP emissions were within allowable limits. For select items regulated by the NESHAP, the GSA Hardware SuperStore continued to collect brief technical data certificates that provide much of the data that U.S. EPA requires the coating end user to maintain at their location. These certificates were then faxed to the Department of Defense liaison office. Also, GSA provided input to how to structure a new Web site that is to offer these documents electronically in the future.

<http://www.r6.gsa.gov/fss/HAC/>  
[Environmental Issues]

Hazardous Material Information Resource System (HMIS) Functional Working Group

The HMIS Functional Working Group (FWG) is chartered under the sponsorship of the HMIS Policy Working Group (PWG). Its role is to represent the users of hazardous materials information and management systems, which deal with Material Safety Data

Sheets (MSDS) or related/associated technical information, and strive to ensure that the functional needs of those users are met. In addition, the FWG prepares recommendations to the PWG on issues pertaining to the functional aspects of improvements to existing or future DOD hazardous materials information and management systems. The core FWG membership consists of voting representatives from the Army, Air Force, Navy, DLA, and GSA.

<http://www.dscr.dla.mil/hmirs/>

Joint Group on Environmental Attribute (JGEnvAtt) meeting – GSA/ Department of Defense/ Other Federal Agency, HQ DLA, Fort Belvoir, Virginia

Summarized to attendees the latest Hardware SuperStore's efforts in delineating those FSC 8010 products that meet the definition of "Low-VOC." Interfaced with key DoD and EPA personnel in learning of the latest efforts to delineate products with environmental attributes. Gathered and brought back references on the latest, four approved environmental attributes, of which "Low-Volatile Organic Compound" (Low-VOC) is one, February 21, 2002.

<http://www.buygreen.dlis.dla.mil/aboutjgenvatt/group.html>

National Defense Industrial Association/ Department of Defense

Attended the 28th Annual Environmental Symposium and Exhibition – Department of Defense, Charleston, South Carolina, March 25-28, 2002: Detailed data was gathered on potential suppliers, and DOD/ Navy/ Marine Corps/ U.S. EPA environmental initiatives that affect our commodities. We learned of new environmental initiatives within the Department of Defense and were able to visit 110 governmental and private booth exhibits, and interface with an estimated 150 Department of Defense customers.

Attended the 7th Annual Joint Service Pollution Prevention Symposium and Exhibition – Department of Defense, August 19-22, 2002. Created and presented a 20-minute presentation on how to identify and purchase "Low-Volatile Organic Compound (Low-VOC)" coatings from GSA, attended by 40 people. Networked with well over 100 customers, and visited well over 200 private companies and government agency exhibits.

Attended 10 hours of technical sessions.

<http://environment.ndia.org/>

National Aerospace Defense Contractors Accreditation Program (NADCAP)

NADCAP represents major prime contractors, suppliers, and government agencies in aerospace, defense, and related industries throughout the United States and internationally. NADCAP is administered by the Performance Review Institute (PRI),

and independent for profit trade association affiliated with the Society of Automotive Engineers (SAE). Through NADCAP, PRI accredits subcontractors and suppliers to aerospace and industry consensus standards. Through NADCAP, PRI assures and enhances quality, saves valuable time and efforts and cuts direct and overhead costs by performing the following functions:

- Compiling audit criteria
- Securing acceptance of these lists as internationally recognized ASE Aerospace Standards
- Auditing suppliers' technical capabilities and conformance to applicable procedures and/or government agencies
- Focusing the responsibility for quality maintenance on the supplier and subcontractors
- Publishing a qualified manufacturer's list and making it available to primes
- Promoting the benefits of using accredited suppliers

GSA Hardware SuperStore is a prime member of the Sealants and Coating Groups and is a member of Qualified Product Management Council (QPMC).

#### Society of Automotive Engineers (SAE)

GSA Hardware SuperStore is a member of the SAE, G8 - Aerospace Coatings Committee and G9 Aerospace Sealants Committee and actively participates in the development of Aerospace Material Standards. These committees are actively involved in the conversions of military specifications and the development of Aerospace Material Standards.

A GSA Hardware SuperStore representative serves as Chairman of the G8 Laboratory Accreditation Sub-Committee for development of a laboratory accreditation protocol, consistent with ISO and IEC accreditation standards. This standard, AS5505, May 2001, provides interpretation of ISO/IEC 17025 and establishes additional requirements for accreditation of testing laboratories for evaluating organic coatings. This step was necessary for the development of the Qualified Manufacturers List (QML) program for G8 Aerospace Coatings.

#### USDA, Forestry Service

GSA/FSS Hardware SuperStore, representative to the USDA, Forestry Service, Tree Marking Paint Standard Development Committee. GSA provided expert consultation for environmental, health, and technical issues leading to development of the FS 2400-400 specification.

### Building Products Pre-Approval Program (BPPAP)

GSA/FSS Hardware SuperStore, representative to the Building Products Pre-Approval Program (BPPAP) Committee, National Institute for Building Sciences, Washington, D.C. This committee coordinates the development of non-governmental architectural and industrial paint and coatings Standards with the Master Painters Institute. Through this committee, more than 26 Federal Specifications and Commercial Item Descriptions have been replaced with Master Painters Institute Standards.

The BPPAP committee, through Scientific Certifications Systems, a third party internationally recognized certification organization, is pursuing development of Environmentally Preferred Purchasing, EPP, and certification for products mandated by Executive Order 13101. The BPPAP reviews and approves the protocol for EPP certification that SCS performs.

### USDA Forest Service

Joint meeting (April 2002) with representatives from the USDA Forest Service Missoula and San Dimas Technology & Development Centers. Discussed new requirements for wildland fire suppression equipment and abolishing the practice of allowing third-party certification to NFPA standards for protective clothing and equipment. As a result, future GSA contractors for wildland fire fighter clothing and personal protective equipment will be required to be ISO registered. The requirement will be phased in over a period of approximately three years.

### National Fire Protection Association (NFPA) Technical Committee on Wildland Fire Fighting Protective Clothing and Equipment

Committee meetings in Seattle, Washington (May 2002), and Missoula, Montana (August 2002). As part of the revision process of NFPA Standard 1977 (Protective Clothing & Equipment for Wildland Fire Fighting), the government-unique requirements for the fire shelter will be dropped from the standard. A performance-based standard will be developed for inclusion in the following revision of NFPA 1977. A new government (Forest Service) specification for a new, improved design of the fire shelter is just now being implemented and it was determined that adequate performance data could not be developed in time for the upcoming revision of NFPA 1977.

9. Examples or case studies of your agency's standards successes, if you so choose.

None.

10. No response

## **International Trade Commission**

The USITC has nothing to report. We are not engaged in any regulatory activity.

## National Aeronautics and Space Administration

1. Number of government-unique standards used in lieu of voluntary consensus standards.

0

NASA uses the categorical method for reporting the use of standards.

2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

2

### Voluntary Standard

### Government Standard

ANSI/ESD S-20.20-1999

NASA-STD-8739.7

ANSI/AIAA S-080-1998

NSS/HP-1740.1 & HP-1740.4

3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in sections 11 and 12 of the Circular.

86

NASA reports the use of standards in the categorical manner.

4. The number of agency employees participating in voluntary consensus standards activities during this period.

131

5. A list by name and acronym of the voluntary consensus standards bodies in which your agency participated during the reporting period.

36

ABMA	American Bearing Manufacturers Association
AIA	Aerospace Industries Association of America
AIAA	American Institute of Aeronautics and Astronautics
AIIM	Association for Information and Image Management
ANSI	American National Standards Institute
ASA/ANSI	Acoustical Society of America/Acoustical Society of America
ASAE	American Society of Agricultural Engineers
ASM	American Society of Metals
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing

ASQ	American Society For Quality
ASTM	American Society for Testing and Materials
AWS	American Welding Society
CCSDS	Consultative Committee for Space Data Systems
CEOS	Committee on Earth Observation Satellites
CGNS	Computational Fluid Dynamics (CFD) General Notation System
EIA	Electronic Industries Alliance
EIA/ANSI	Electronic Industries Alliance / American National Standards Institute
ESDA	Electrostatic Discharge Association
FGDC	Federal Geographic Data Committee
GEIA	Government Electronics & Information Technology Association
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IEST	Institute of Environmental Sciences & Technology
IPC	Institute for Interconnecting and Packaging Electronic Circuits
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization/ International Electrotechnical Commission
ISOC	Internet Society
ITRI	Interconnection Technology Research Institute
NACE	National Association of Corrosion Engineers International
NCSL	National Conference of Standards Laboratories
NFPA1	National Fire Protection Association
RTCA	Radio Technical Commission for Aeronautics
SAE	Society of Automotive Engineers
SFCG	Space Frequency Coordination Group
TIA	Telecommunications Industry Association

6. A description of how your agency currently reports its use of voluntary consensus standards.
  - a. First time use of standards.
  - b. No response.
  - c. Multiple.
  - d. Yes.
  - e. No.



7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

OMB Circular A-119 continues to provide stimulus for NASA's effort to improve its Technical Standards Management System, enhance the use of Voluntary Consensus Standards Products, and challenge the need for NASA-unique Technical Standards requirements.

8. Conformity assessment activities in which agencies were involved.

As an acquisition oriented agency, conformity assessment is a major element of our policies and procedures to assure the safety and mission success of NASA programs. NASA is continuously evaluating and improving our conformity assessment practices and procedures.

NASA has a long-standing practice of working with other government agencies and the public sector to integrate best practices into our activities. NASA continues to work with the Department of Defense (DoD) and the aerospace industry to adopt and define consistent quality practices. NASA routinely utilizes other government agencies to assist us with contract administration services (CAS) including substantial conformity assessment activities. The Defense Contract and Audit Agency, Defense Contract Management Agency, Office of Naval Research, and other activities continue to provide conformity assessment services for NASA programs. These are ongoing relationships that utilize the expertise and infrastructure that are resident within these agencies and allow NASA to limit NASA internal assessments to areas where external capabilities are not available. The management and monitoring processes established for these CAS activities provides a mechanism to continually exchange ideas and best practices related to conformity assessment.

Finally, NASA is pursuing Star status in the Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP). Participation in the VPP provides a mechanism for both improving internal safety practices and for utilizing the services of the OSHA programs to perform oversight inspections. To date, the Langley Research Center and the Johnson Space Center have achieved Star status and have been recognized by OSHA, the other NASA Centers are in various stages of preparation for assessment by OSHA.

9. Examples or case studies of standards successes.

In FY 2002, NASA further enhanced its use and support of voluntary consensus standards through additions to the NASA Integrated Technical Standards System implemented during FY 2001. The primary goals of this system were to develop a suite of collaborative tools to: (1) provide consolidated, Web-based access to standards for NASA users agency-wide; (2) augment NASA's use, support, and adoption of non-

government voluntary consensus standards by highlighting their availability; (3) provide users with notification on changes, updates, and revisions to standards in use and; (4) improve application of standards by linking them with engineering lessons learned, best practices, and experiences.

In FY 2002, NASA personnel downloaded more than 26,525 non-government voluntary consensus standards from the agency-wide Full-Text Technical Standards System. User attention was directed to the adopted VCSs by designating them as “NASA Preferred Technical Standards.”

The newly implemented Standards Update Notification System (SUNS) is now being recognized as a viable tool for bringing program specifications up to date. A pilot test of SUNS was conducted for the Space Shuttle Solid Rocket Booster-Thrust Vector Control Subsystem. Of the 298 non-NASA documents included in the 14 system specifications, the pilot test found that only 124 were still active, but the remaining 174 were either canceled or inactive; replacements or superseding documents were found for 129 of the 174. Because of this pilot, the Space Shuttle Chief Engineers Council has given its endorsement of the SUNS for updating external references in all Space Shuttle Program documents—many of which are more than 20 years old. To date, nearly 5,000 documents from a variety of programs have been registered for update notification. Approximately 28 percent of these documents have been updated by the respective SDO suggesting the need for substantial program follow-up. User comments have suggested that SUNS could be even more valuable for the agency if standards developing organizations would provide more information on what changes were made to a document, and particularly whether those changes are technical or editorial in nature. Experience suggests that linking lessons learned to relevant technical standards has significant potential for enhancing and improving engineering practices by providing a basis for the interpretation and use of standards.

In FY 2002, over 264 lessons learned from NASA’s Lessons Learned Information System (LLIS) were linked to 89 relevant NASA Preferred Technical Standards; linking of lessons learned has already resulted in the update of some standards. Because of favorable user response, this effort is now being extended; over 150 aerospace engineering lessons learned databases were identified which link to over 1,300 lessons learned listings that will be used as a basis for this extension. To date, growing use of the NASA Integrated Technical System and feedback from users supports the value of the system to their work on NASA programs/projects and research activities. This is due to the ready availability of the technical standards products and integration of related information online, reinforcing the advantages of enterprise-wide solutions and the “one-stop shopping” concept.

On the international front, NASA-led efforts resulted in publication of two significant standards through ISO. As a result of government/industry/international team cooperation, NASA-STD-3000, "Man-Systems Integration Standards," widely used as the Human Factors standard for space systems, has been converted and adopted by ISO

for publication as ISO/PRF 17399, “Space Systems—Man-Systems Integration.” Also, through similar cooperation on electromagnetic interference (EMI) for spacecraft, ISO 14302, “Space Systems—Electromagnetic Compatibility Requirements” was developed and published in FY 2002. Through promotion of common standards, these initiatives have enabled greater collaborative efforts among the NASA Centers, realized cost savings through eliminating duplicate standards services, and enhanced engineering capability by providing common, seamless access to relevant and current standards. As such, they have made substantive contributions toward implementing the NASA Administrator’s vision of “One NASA.”

10. Comments.

None.

## National Archives and Records Administration

### 1. Government-unique standards used in lieu of voluntary standards.

6<sup>1</sup>

A. Government standard: DOJ U.S. Marshal's Service requirements for physical security

Voluntary standard: None available

Explanation: There are no established voluntary standards that address the appropriate levels of security for government facilities

B. Government standard: NARA data standard

Voluntary standards (5): MARC – Machine Readable Cataloging  
EAD – Encoded Archival Description  
APPM – Archives, Personal Papers, and Manuscripts  
ISAD (G) – General International Standard Archival Description  
ISAAR (CPF) – International Standard Archival Authority Record for Corporate Bodies, Persons, and Families

Explanation: These standards do not meet the precise needs of our agency. However, we continue to bring our individual data elements guidance closer into line with these voluntary standards.

### 2. Identification of voluntary consensus standards that have been substituted by your agency for government-unique standards during the reporting period because of an agency review under section 15b (7) of the Circular.

1

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<sup>1</sup> NIST Editorial Note: NIST is revising the NARA number of government-unique standards (GUSs) used in lieu of voluntary consensus standards (VCSs) reported to NIST. NARA reports six GUSs used in lieu of VCSs. After a review of the NARA report, NIST believes the total number to be one. In paragraph 1A of its report, NARA counts one GUS as used in lieu of a VCS where no VCSs exist. Such GUSs do not need to be reported. In paragraph 1B of its report, NARA reports one GUS used in lieu of five VCSs. Therefore, the total number should be one instead of the six reported by NARA.

We adopted ANSI/ISO 3334-1991, Micrographics – ISO Resolution Test Chart No. 2 – Description and Use, in place of NIST – SRM 1010a, Microcopy Test Chart (ISO Test Chart No. 2), certified June 1, 1990.

3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in Sections 11 and 12 of the Circular.

9

4. The number of agency employees participating in voluntary consensus standards activities during this period.

13

5. List by name and acronym of the voluntary consensus standards bodies in which NARA participated during the reporting period.

12

American National Standards Institute/National Information Standards Organization (ANSI/NISO)

- Z39.18 Revision Committee (Scientific and Technical Reports: Elements, Organization, and Design)

Association for Information and Image Management (AIIM)

- C22 – Committee on Evidentiary Support

Association for Suppliers of Printing, Publishing, and Converting Technologies (NPES)

- PDF/A Working Group (joint with AIIM)

International Council on Archives (ICA)

- Descriptive Standards Committee

International Organization for Standardization (ISO)

- Technical Committee 42, Work Group 5 – Physical Properties and Image Permanence of Photographic Materials
- Technical Committee 42, Work Group 5, Task Group 2 – Stability of Black-and-White Prints
- Technical Committee 42, Work Group 5, Task Group 3 – Stability of Color Pictorial Images

- Technical Committee 42, Work Group 5, Task Group 4 – Stability of Medical Imaging Hardcopy Output
- Technical Committee 46, Subcommittee 11 – Archives/Records Management

National Fire Protection Association (NFPA)

- Technical Committee on Records Protection

Society of American Archivists (SAA)

- Standards Committee
- EAD Working Group

6. A description of how your agency currently reports its use of voluntary consensus standards.

- a. Does your federal agency report (1) only the first-time use of standards, (2) continued uses of standards or (3) both first time and continued uses of standards?

(3) – We report the standards cited in any regulations issued in the Fiscal Year, including continued use of standards in revised regulations.

- b. Does your agency report (1) the total number of standards it uses or (b) each instance where the agency uses (i.e., references) a standard?

(1) – We report the total number of standards.

- c. Does your agency report multiple editions of a single standard as one standard used or as multiple standards used?

N/A, but we would report as multiple standards used if the occasion arose.

- d. Does your agency report standards that it uses for guidance purposes (as opposed to, or in addition to, standards used for compliance purposes)?

Yes.

- e. Does your agency report use of standards from non-ANSI-accredited standards developers including industry consortia?

None in FY 2002; however, we have reported participation in two non-ANSI-accredited voluntary consensus standards bodies in response to question two (ICA and SAA).

7. An evaluation of the effectiveness of Circular A-119 policy and any recommendations for changes to the Circular.

We believe the Circular is working effectively and have no recommendations for changes.

8. No comment.

9. No comment.

10. No comment.

## National Communications Systems

Within the NCS, the Chief, Technology and Programs Division, also chairs the Federal Telecommunications Standards Committee (FTSC). As part of these duties, the Chief is the focal point for telecommunications and related information system standards for the Office of the Manager, National Communications System (OMNCS). His telephone number is (703) 607-6200, and his e-mail address is fonashp@ncs.gov.

The OMNCS provides the chair of the FTSC. This interagency committee prepares standards and recommendations on matters affecting national security and emergency preparedness (NS/EP) and in other areas of communications approved by the committee because of requests from members. It also provides advice to members on how to best represent the government's NS/EP interests in work in industry and international standards committee.

The FTSC and members of the OMNCS work extensively with voluntary standards organizations to ensure that government requirements are considered as the standards are developed.

Additional reporting requirements:

1. Number of government-unique standards used in lieu of voluntary consensus standards.

The OMNCS had no reportable use of government-unique standards in lieu of voluntary consensus standards during FY 2002.

0

2. Number of voluntary consensus standards substituted for government-unique standards.

The OMNCS has not substituted any voluntary consensus standards for government-unique standards during the reporting period.

0

3. The number of voluntary consensus standards that your agency used during FY 2002 based upon procedures set forth in sections 11 and 12 of the Circular.

4



4. Number of agency employees participating in voluntary consensus standards activities during this period.

10

5. The list by name and acronym of voluntary consensus standards bodies in which the OMNCS participated during FY 2002. Staff of the OMNCS participate in the following voluntary standards related committees.

15

The OMNCS works within the voluntary consensus standards bodies to ensure developing and existing consensus standards to ensure that government requirements are considered.

Organizations Accredited by the American National Standards Institute (ANSI):

- Committee T1, Telecommunications, and its technical subcommittees
- Telecommunication Industry Association (TIA) committees TR-41, TR-45, and TR-46
- Institute of Electrical and Electronics Engineers (IEEE)

Commercial and Multi-National Organizations Not Accredited by ANSI:

- 3rd Generation Partnership Project (3GPP)
- 3rd Generation Partnership Project 2 (3GPP2)
- ATM Forum
- Federal Telecommunication Standards Committee (OMNCS furnishes Chair and Executive Secretary)
- Internet Engineering Task Force (IETF)
- International Telecommunication Advisory Committee and its study groups (Department of State)
- International Telecommunication Union, Telecommunications Sector (ITU-T)
- Multiservice Switching Forum (MSF)
- Network Interconnection Interoperability Forum (NIIF)
- Parlay Group Inc. (for Application Programming Interfaces)
- Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON)
- TeleManagement Forum

6. How agencies report their use of standards.

- a. The OMNCS reports both continued uses of standards.
- b. The OMNCS report the total number of standards it uses.

- c. The OMNCS reports multiple editions of a single standard as one standard used.
  - d. The OMNCS reports standards that it uses for guidance as well as those standards used for compliance purposes.
  - e. The OMNCS reports the use of standards from non-ANSI-accredited standards developers including industry consortia.
7. Evaluation of the effectiveness of Circular A-119 policy and recommendations for changes to the Circular. None that this time.
  8. The OMNCS has not been involved in any conformity assessment activities.
  9. No response.
  10. No response.

**National Science Foundation**

No report.

## **Nuclear Regulatory Commission**

The Nuclear Regulatory Commission (NRC) has been an active participant in the development and use of consensus standards since its establishment in 1975. The agency developed guidance in 1997 to increase its focus and emphasis on interacting with both industry groups and professional societies to develop new codes and standards needed to support efficient, effective, and consistent performance of industry activities important to safety. Consistent with Public Law 104-113, National Technology Transfer and Advancement Act of 1995 (P. L. 104-113), the NRC encourages industry to develop codes, standards, and guides that NRC can endorse and the industry can carry out, and the NRC has taken steps to increase the involvement of licensees and others in the NRC regulatory process.

In FY 2002, NRC took several actions to increase the effectiveness and efficiency of our process for implementing P. L. 104-113 and OMB Circular A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities. On February 20, 2002, NRC staff met with representatives from the standards development organizations (SDOs) who provide codes and standards for the nuclear industry. The NRC has been hosting these meetings on a semi-annual basis. The purpose of these meetings is to foster better communication and discuss standards under development, current needs, and priorities. The SDOs that the Department of Energy (DOE) interacts with are, in many cases, the same as the NRC, and the two agencies have begun co-hosting these meetings. This joint format has proved to be of such benefit that the National Institute of Standards and Technology (NIST), who has been a participant, increased its role by hosting the July 25, 2002, meeting. The next meeting has been scheduled for February 2003.

Consistent with NRC Management Directive 6.5, NRC Participation in the Development and Use of Consensus Standards, which was created to provide direction to the NRC staff for implementing P.L. 104-113 and OMB Circular A-119, Web-based training has been developed for NRC staff connected with the use of standards. The purpose of the training is to explain the requirements of P.L. 104-113 and OMB Circular A-119 in detail and provide guidance to the NRC staff relative to organizational responsibilities. All NRC staff involved in the development and use of standards and cognizant management took this training in FY 2002.

The NRC Web site, <http://www.nrc.gov/what-we-do/regulatory/standards-dev/sdo-comm.html>, contains, among other things, the SDOs with which the agency interfaces, consensus standards used by the NRC, and NRC staff representatives on SDO committees.

1. Identification of all instances when the agency used government-unique standards in lieu of voluntary consensus standards (for each instance include agency rationale for such use, as well as the specific government-unique standard used).

0

2. Identification of voluntary consensus standards that have been substituted for government-unique standards because of an agency review under section 15(b) (7) of the Circular.

0

3. The number of voluntary standards the agency adopted between October 1, 2001, and September 30, 2002, based on the procedures set forth in sections 11 and 12 of the Circular.

8

A. Standards adopted. During this reporting period, the NRC adopted eight American Society of Mechanical Engineers (ASME) Codes. It should be noted that standards that have not been generically approved for use by all licensees have not been listed (i.e., when one licensee requests permission and receives regulatory approval to use a specific standard).

B. Identify those instances where, consistent with interim guidance, requests were made in proposed rulemaking for public comment on the use of consensus standards or information was provided in the final rulemaking regarding public comment on the use of consensus standards.

Information regarding public comment on the use of consensus standards was provided in the following proposed rulemaking: 10 CFR Part 50, Industry Codes and Standards, 66 FR 40626, August 3, 2001.

4. Number of agency employees participating in voluntary consensus standards activities.

144

5. The number of voluntary consensus standards bodies in which there is agency participation, as well as the number of agency employees participating.

488

During FY 2002, NRC staff participated within 15 SDOs on a total of 488 standards writing, consensus, and board-level committees.

6. A description of how your agency currently reports its use of voluntary consensus standards.

- a. No comment.

- b. No comment.

- c. No comment.
  - d. No comment.
  - e. No comment.
7. An evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

The policy guidelines provided in OMB Circular A-119 for participating in voluntary consensus standards bodies and using voluntary consensus standards are generally consistent with long-standing NRC practices. The NRC staff believes that these guidelines provide appropriate direction and encouragement for federal agencies to develop internal agency-wide guidelines to implement P. L. 104-113 and OMB Circular A-119. These guidelines also provide sufficient and reasonable flexibility for each agency to make an independent case-by-case determination as to the usability of a particular standard within that agency's scope and responsibility.

- 8. No comment.
- 9. No comment.
- 10. No comment.

Standards Endorsed by NRC  
 October 1, 2001 - September 30, 2002

SDO1	Standard Identifier	Year	Title	Method of Endorsement2
ASME	BPV	1997	ASME Boiler and Pressure Vessel Code	Regulation
ASME	BPV	1998	ASME Boiler and Pressure Vessel Code	Regulation
ASME	BPV	1999	ASME Boiler and Pressure Vessel Code	Regulation
ASME	BPV	2000	ASME Boiler and Pressure Vessel Code	Regulation
ASME	OM	1997	Code for Operation and Maintenance of Nuclear Power Plants	Regulation
ASME	OM	1998	Code for Operation and Maintenance of Nuclear Power Plants	Regulation
ASME	OM	1999	Code for Operation and Maintenance of Nuclear Power Plants	Regulation
ASME	OM	2000	Code for Operation and Maintenance of Nuclear Power Plants	Regulation

Table footnotes:

SDO: Standards Developing Organization

ASME: American Society of Mechanical Engineers

Amendment to 10 CFR 50.55a (67 FR 60520; September 26, 2002)

## U.S. Government Printing Office

The GPO utilizes available voluntary standards in its many operations whenever they are applicable. However, some standards are unique to GPO's printing and binding operation. These include:

- Quality assurance through attributes program for printing and binding
- Quality assurance through attributes program for microforms
- Quality assurance through attributes program for composition
- GPO guidelines for specifying quality and determining compliance of MICR, OCR, and OMR
- Government paper specification standards
- Government paper samples

The number of voluntary consensus standards used this past year has increased since the last report but the number is not currently available.

GPO employees in scientific fields (e.g. engineering, paper science, chemistry, and print technology) attend and participate on a voluntary basis in professional organizations that are involved in standards work. Some are ASTM, ANSI, AIIM, and TAPPI. The number of employees involved varies from year to year depending on available funds.

The GPO has a new effort in place for FY 2003 to review all of its material and graphic supply procurement specifications and identify voluntary consensus standards for their purchase. GPO will also implement a 5-year review cycle for standards developed in-house.

Even though GPO is a legislative agency, the application of the OMB Circular A-119 in our work has saved resources by not “reinventing the wheel.”



## U.S. Postal Service

A representative of the USPS Engineering Branch reported that there is no office within the Postal Service that develops standards applicable to any other federal agency.

Within the Engineering Branch, the focus is to utilize commercial standards wherever feasible. However, they do have 1,110 internal engineering standards<sup>2</sup> that address requirements for the fabrication and/or manufacturing of postal equipment (to include repair parts). Those standards address such issues as material and process requirements to ensure uniformity in deployment of USPS equipment nationwide. A disciplined USPS engineering process is used to develop each standard.

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<sup>2</sup> NIST Editorial Note: NIST is not reporting the 1,110 internal engineering standards reported by the USPS as government-unique standards. NIST is not aware of any voluntary consensus standards that duplicate the USPS standards. Therefore, the 1,100 USPS are not “government-unique standards used in lieu of voluntary consensus standards.”

## APPENDIX C -- LIST OF AGENCIES

ATBCB – Architectural and Transportation Barrier Control Board  
CPSC – Consumer Product Safety Commission  
DOA/AMS – Department of Agriculture, Agricultural Marketing Service  
DOA/APHIS – Department of Agriculture, Animal and Plant Health Inspection Service  
DOA/CCC – Department of Agriculture, Commodity Credit Corporation  
DOA/FNS – Department of Agriculture, Food and Nutrition Service  
DOA/FSIS – Department of Agriculture, Food Safety Inspection Service  
DOA/GIPSA – Department of Agriculture, Grain Inspection, Packers, and Stockyard Administration  
DOA/RUS – Department of Agriculture, Rural Utilities Service  
DOC/NIST – Department of Commerce, National Institute of Standards and Technology  
DOC/NOAA/NMFA – Department of Commerce, National Marine Fisheries Administration  
DOC/PTO – Department of Commerce, Patent and Trademark Office  
DOC/TA – Department of Commerce, Technology Administration  
DOE – Department of Energy  
DOE/FERC – Department of Energy, Federal Energy Regulatory Commission  
DOI – Department of the Interior  
DOI/MMS – Department of the Interior, Minerals Management Service  
DOI/OSM – Department of the Interior, Office of Surface Mining  
DOI/USFWS – Department of the Interior, U.S. Fish and Wildlife Service  
DOJ – Department of Justice  
DOL/MSHA – Department of Labor, Mine Safety and Health Administration  
DOL/OSHA – Department of Labor, Occupational Safety and Health Administration  
DOL/Public Contracts – Department of Labor, Employment Standards Administration, Wage and Hour Division  
DOT/FAA – Department of Transportation, Federal Aviation Administration  
DOT/FHWA – Department of Transportation, Federal Highway Administration  
DOT/FMCSA – Department of Transportation, Federal Motor Carrier Safety Administration  
DOT/FRA – Department of Transportation, Federal Railway Administration  
DOT/NHTSA – Department of Transportation, National Highway Traffic Safety Administration  
DOT/OPS – Department of Transportation, Office of Pipeline Safety  
DOT/RSPA – Department of Transportation, Research and Special Programs Administration  
DOT/USCG – Department of Transportation, U.S. Coast Guard  
Education – Department of Education  
EPA – Environmental Protection Agency  
FCC – Federal Communications Commission  
FTC – Federal Trade Commission  
HHS – Department of Health and Human Services  
HHS/Center for Medicare and Medicaid Services  
HHS/FDA – Department of Health and Human Services, Food and Drug Administration  
HHS/HCFA – Department of Health and Human Services, Health Care Facilities Administration  
HHS/PHS – Department of Health and Human Services, Public Health Service

HUD – Department of Housing and Urban Development  
NSF – National Science Foundation  
NRC – Nuclear Regulatory Commission  
SBA – Small Business Administration  
Treasury, BATF – Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms  
U.S. Army Corps of Engineers  
USAID – Agency for International Development  
USPS – United States Postal Service

**APPENDIX D – TABLES AND CHARTS**

**Table 1 – FY 2002 Statistics on Federal Agency Participation in Development and Adoption of Voluntary Consensus Standards**

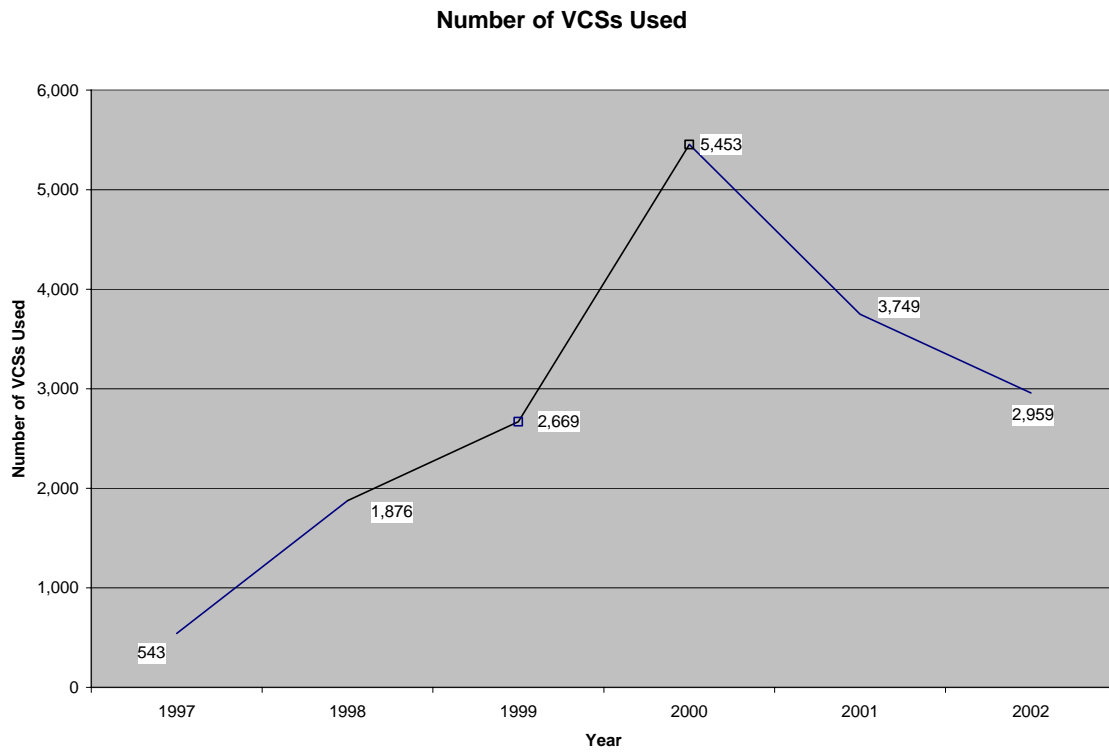
<b>FY 2002 STATISTICS ON FEDERAL AGENCY PARTICIPATION IN DEVELOPMENT AND ADOPTION OF VOLUNTARY CONSENSUS STANDARDS</b>						
Number of Voluntary Consensus Standards Activities in Which Agencies Reported Participation in 2001	Number of Agency Employees Participating in Voluntary Consensus Standards Activities		Number of Voluntary Consensus Standards Used		Number of Voluntary Consensus Standards Substituted in FY 2002 for Government-Unique Standards	Number of Government-Unique Standards Used in Lieu of Voluntary Consensus Standards in FY 2002
	FY 2002	Change from FY 2001	FY 2002	Change from FY 2001		
<b>1,157</b>	<b>3,229</b>	<b>512</b>	<b>2,959</b>	<b>-790</b>	<b>91</b>	<b>65</b>

**Table 2 –Federal Agency Information Provided in Agency Reports**

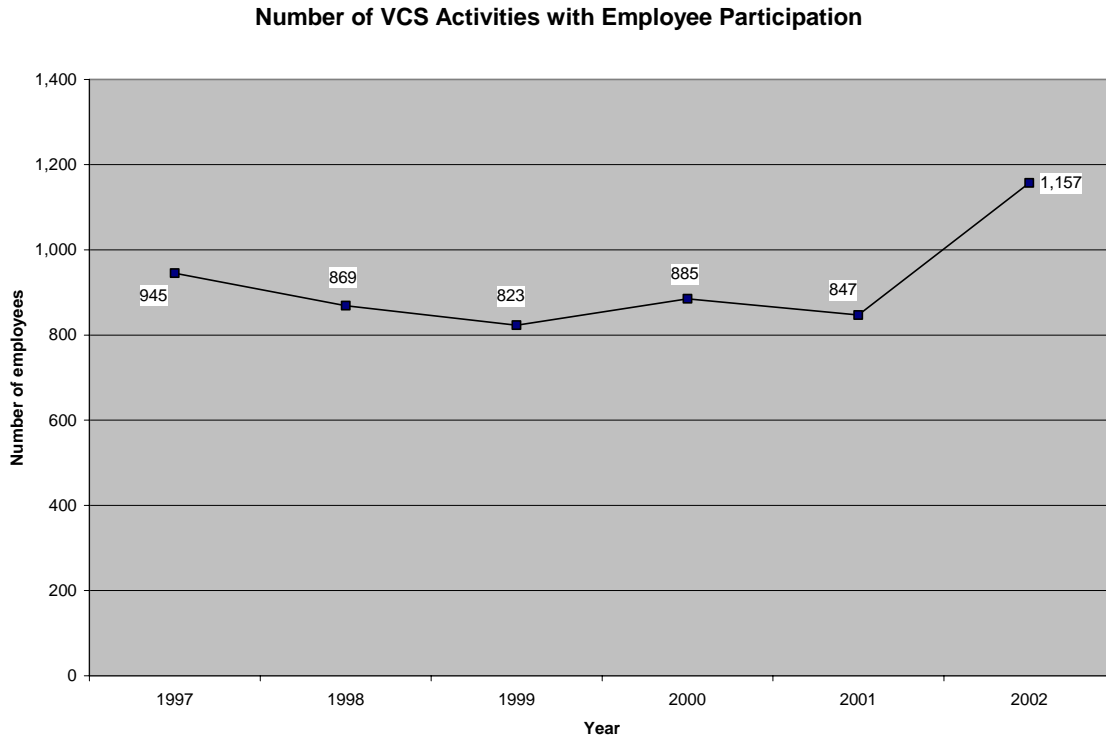
<b>2002 Federal Agency Information on Participation/Adoption of Voluntary Standards Activities Required by OMB Circular A-119</b>							
<b>Agency</b>	<b>GUS Used in Lieu of VCS</b>	<b>VCS Substituted for GUS</b>	<b>VCS Used in 2002</b>	<b>Agency Employees Participating in VCS Activities</b>	<b>Change from 2001</b>	<b>VCS Activities In Which There is Agency Participation</b>	<b>Change from FY 2001</b>
USDA	0	0	177	82	23	51	12
DOC	0	0	0	439	-1	165	-3
DOD	0	64	53	461	-79	109	54
NCS	0	0	4	10	0	15	-3
ED	0	0	17	2	0	1	0
DOE	0	0	164	681	18	57	-1
HHS	5	1	616	515	234	39	-18
HUD	2	1	300	10	0	5	0
DOI	2	0	616	300	231	19	14
DOJ	0	0	72	5	0	2	-1
DOL	4	0	200	60	-16	15	-20
DOS	0	0	0	0	-8	0	-1
DOT	1	0	212	176	-1	54	-114
TRES	4	0	334	66	-1	8	0
VA	0	0	0	14	2	20	-4
USAID	0	0	0	0	0	0	0
CPSC	0	1	1	29	-2	8	-1
EPA	38	2	9	42	-4	22	2
FCC	0	0	0	5	0	7	6
FEMA	N/R	N/R	N/R	N/R	N/R	N/R	N/R
FTC	0	0	0	0	0	0	0
GSA	2	19	81	44	3	24	-83
GPO	6	N/R	N/R	N/R	0	N/R	0
USITC	0	0	0	0	0	0	0
NASA	0	2	86	131	100	36	27
NARA	1	1	9	13	8	12	6
NSF	N/R	N/R	N/R	N/R	0	N/R	0
NRC	0	0	8	144	5	488	470
USPS	0	0	0	0	N/R	0	N/R
<b>TOTALS</b>	<b>65</b>	<b>91</b>	<b>2,959</b>	<b>3,229</b>	<b>512</b>	<b>1,157</b>	<b>342</b>

Note: "N/R" means No Report received.

**Chart 1 – Number of Voluntary Consensus Standards Used**



**Chart 2 – Number of Voluntary Consensus Standards Activities with Employee Participation**



**Chart 3 – Number of Voluntary Consensus Standards Substituted for Government-Unique Standards**

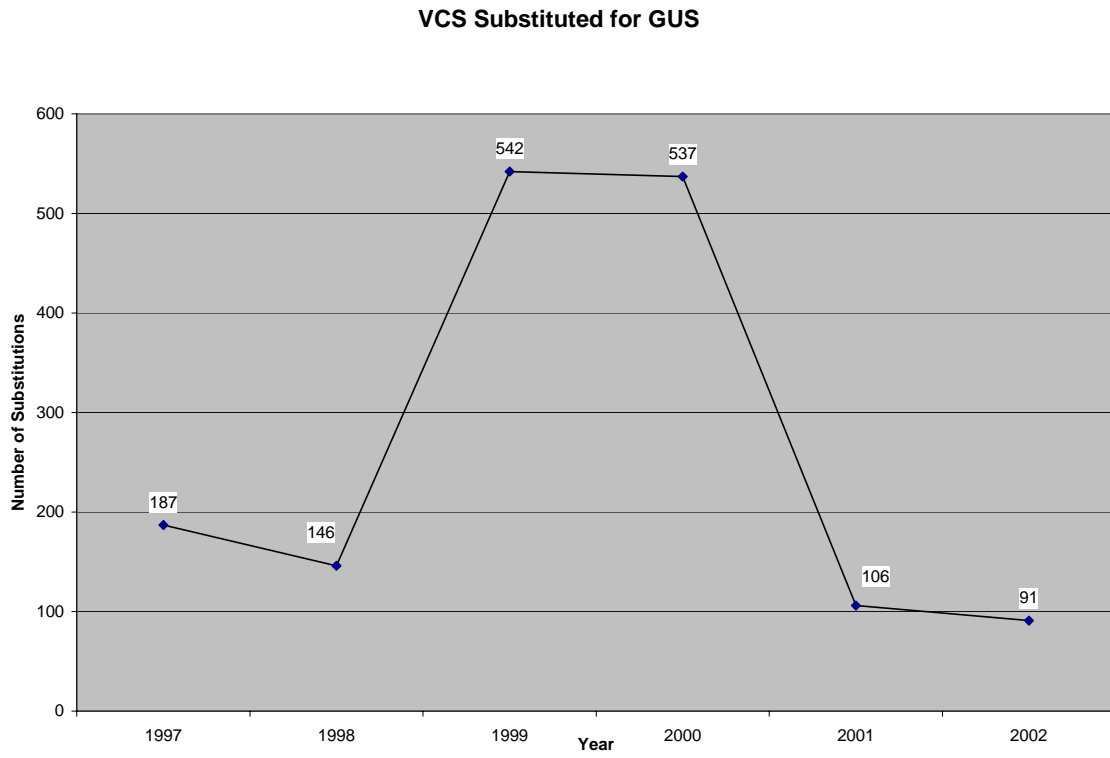




Chart 4 – Number of Government-Unique Standards Used in Lieu of Voluntary Consensus Standards

