NISTIR 7789

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

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Standards Services Group
Standards Coordination Office
Laboratory Programs

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National Institute of
Standards and Technology
U.S. Department of Commerce

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U.S. Department of Commerce
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Summary Report on Federal Agency Use of Private-Sector Standards and Conformity Assessment Activities for Fiscal Year 2010

1.0 Executive Summary

The U.S. Department of Commerce presents this summary report for the Office of Management and Budget (OMB) in compliance with OMB Circular A-119 and Public Law 104-113, the National Technology Transfer and Advancement Act (NTTAA). As required by Section 9 of the Circular, this report, prepared by the National Institute of Standards and Technology (NIST), describes activities related to the use of voluntary consensus standards (VCSs) by 25 Federal agencies during Fiscal Year (FY) 2010.

In keeping with the requirements of the NTTAA, Federal agencies continue to look to VCSs in support of their regulatory and procurement activities. NIST, through its Standards Incorporated by Reference database, independently tracks government use of private-sector standards. As of the date of this report, NIST has identified over 9,360 citations of standards incorporated by reference in regulatory documents – more than 80 percent of these were developed by the private sector. Available online at http://standards.gov/sibr/query/index.cfm, this interactive database illustrates the extensive use of voluntary standards throughout the U.S. Government.

For FY 2010, three agencies each reported issuing a government unique standard (GUS) in lieu of VCSs raising the total to 48 currently reported GUSs. The agencies required these GUSs either for a unique purpose, to provide cost savings and greater protection, or to simplify compliance. The U.S. Department of Agriculture (USDA) Forest Service created a standard for fire suppressant foam for wildland firefighting in cooperation with the Department of Interior (DOI), the State of California Department of Forestry and Fire Protection, and the Canadian Interagency Forest Fire Center. The Forest Service's GUS for foam products is used specifically by wildland fire equipment and for unique situations such as use of helicopters to deploy foams, remote storage conditions and varying water quality in wildland settings, all of which were not addressed adequately by the existing National Fire Protection Association's VCS. The Department of Labor developed a single standard in lieu of sixteen VCSs for cranes and derricks in construction to cover all varieties of cranes and derricks and their applications. The Department of Transportation developed an 'ejection mitigation' standard related to vehicle airbag deployment in lieu of referencing standards maintained by two private sector standards developers that deal with mitigation of external vehicle impacts. This GUS provided for additional safety to passengers and reduced costs for producers over the existing VCSs.

In FY 2010, Federal agencies reported 231 new uses of VCSs. Both the continued adoption of significant numbers of VCSs along with the careful consideration and low rate of development of new GUSs in lieu of VCSs demonstrate the NTTAA's success in encouraging agencies to look

first to voluntary consensus standards to meet their regulatory, procurement, and conformity assessment needs.

Agencies reported 2,837 personnel participating in a total of 518 standards-developing organizations during FY 2010. This high level of Federal engagement reflects a sustained commitment of the U.S. government to the activities of the private sector led VCS system.

Individual agency reports for FY 2010 reflect the benefits of this engagement, demonstrating that a strong Federal investment in voluntary standards development helps to provide a sound technical basis for standards, speeds the standards development process, and enables the adoption of VCSs to support agency missions. Furthermore, Federal use of VCSs yields economic and social benefits to numerous stakeholders including Federal agencies, the Nation's businesses, and the public through reduced injuries and deaths, increased transactional efficiencies, reduced administrative burdens, and lower costs of products and services.

In their FY 2010 reports, agencies provided several examples of benefits realized from the adoption of and participation in the development of VCSs. For example, the Department of Homeland Security (DHS) reports achieving greater marketplace competition, lower cost, improved features and a larger vendor selection through their collaboration on the development of the ANSI/NIST-ITL 2-2008 standard for iris capture cameras. In another example, DHS's Office for Interoperability and Compatibility (OIC) adopted the Emergency Data Exchange Language - Hospital AVailability Exchange (EDXL-HAVE) messaging standard developed by the Organization for the Advancement of Structured Information Standards (OASIS) to enable the exchange of hospital status, capacity, and resource availability/usage information among medical and health organizations and emergency information systems. Deployed in Haiti for earthquake relief, the standard's flexibility and adaptability enabled effective sharing of life-saving information. As a preliminary example of the value of electronic health records (EHR) technology, the Indian Health Service (IHS) of the Department of Health and Human Services (HHS) reported near real time surveillance of H1N1 flu in their populations and effective routing of scarce vaccines using their Resource and Patient Management System (RPMS). IHS uses Health Level 7 (HL7) standards for interoperability between RPMS and external systems. Section 8.0 contains further details on these examples.

2.0 Overview and Scope

NIST formulated this report based on input submitted by 25 Federal agencies in fulfillment of the requirements of OMB Circular A-119 and the reporting requirements of Section 12 (d) (3) of the NTTAA. The report describes Federal agency activities related to the use of private-sector standards in regulation, procurement, and conformity assessment during FY 2010. A list of reporting agencies is in Appendix A.

3.0 Federal Agency Use of Standards

The OMB Circular requires that Federal agencies use voluntary consensus standards in lieu of government-unique standards in their regulatory and procurement activities. However, a Federal agency is given discretion in deciding whether to use existing voluntary consensus standards if the agency determines that the use of such standards would either be inconsistent with applicable laws or otherwise impractical. The Circular also directs agencies to establish a process for continuously reviewing their use of standards for purposes of updating such use, including substitution of private-sector standards for government-unique standards wherever possible.

3.1 Government-Unique Standards Used in Lieu of Voluntary Consensus Standards

The OMB Circular requires that agencies report their use of standards on either a "categorical" or a "transactional" basis. Those agencies that report on a categorical basis are not required to list each instance that a government-unique standard is used in lieu of a private-sector standard in procurement actions. However, such agencies are required to have a system in place to ensure that government-unique standards are developed only when suitable private-sector standards are not available for use. At present, only the Department of Defense (DoD) and the National Aeronautics and Space Administration (NASA) report on a categorical basis. In situations where private-sector standards do not exist, agencies are not required to report on their use of GUSs.

Table 3.1 Government-unique Standards Used in Lieu of Private Sector Standards Statistics

Agency	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
USDA									1	1	1	1	1	1
HHS	3	3	3	3	3	3	3	2	2	4	4	1	1	1
HUD				2	2	2	2	2	2	2	2	2	2	2
DOL					1	2	4	5	5	6	8	8	9	10
DOT	1	2	2	2	2	3	3	3	3	3	3	3	3	4
EPA		3	28	29	40	45	50	50	50	50	23	23	23	23
GSA				3	2	2	3	2	2	3	3	3	3	3
NARA				1	1	1	1	1	1	1	1	1	1	1
CPSC				1	1	1	2	2	2	2	2	2	2	2
GPO				4	4	4	4	4						
ACCESS										1	1	1	1	1
New Uses	4	4	25	12	12	7	9	1	1	5	2		1	3
Discontinued					1			2	4		27	3		1
Total In Use	4	8	33	45	56	63	72	71	68	73	48	45	46	**48**

Table 3.1 illustrates the cumulative number of GUSs (total by year and agency) used in lieu of private sector standards since FY 1997, as well as the number of GUSs introduced and discontinued in each fiscal year.

During FY 2010, three Federal agencies found it necessary to develop their own standard instead of using private sector standards. Appendix C lists each agency, their new GUS, and their

rationale for why use of the relevant VCS was impractical. For a complete listing of the government-unique standards used in lieu of voluntary consensus standards and justifications from FY 1997 through FY 2010, visit http://standards.gov/NTTAA/agency/index.cfm.

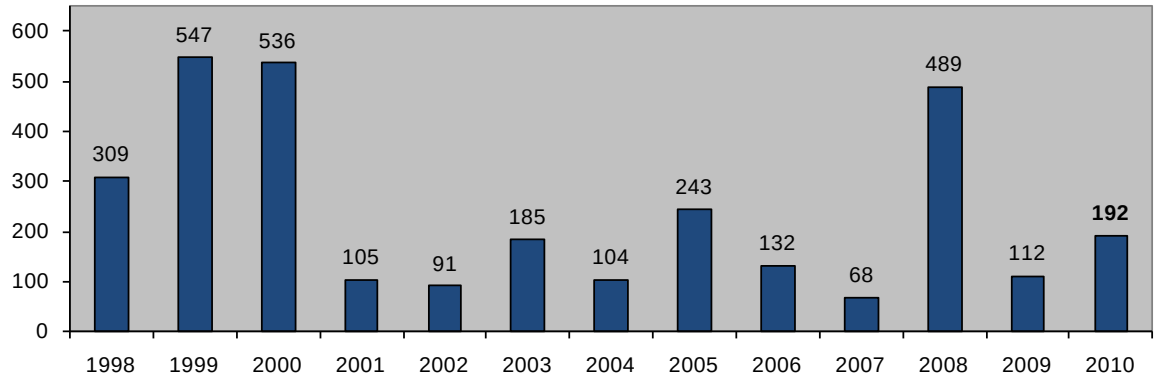
3.2 New Uses of Voluntary Consensus Standards (VCSs) by Federal Agencies

For FY 2010, Federal agencies reported the adoption of 231 new VCSs. Three agencies—DoD, DHS, and USDA—accounted for nearly 60 percent of the reported new uses.

3.3 Current Agency Reporting on Voluntary Consensus Standards Substituted for Government-Unique Standards

Federal agencies also report annually on the number of VCSs that they have substituted for GUSs during the year. Figure 3.3 illustrates the substitutions for each year since FY 1998. In FY 2010, Federal agencies reported substituting 192 VCSs for GUSs.[1] All of these substitutions were within DoD.

Figure 3.3 — Number of Voluntary Consensus Standards Substituted for Government-Unique Standards



4.0 Federal Participation in Private-Sector Standards Activities

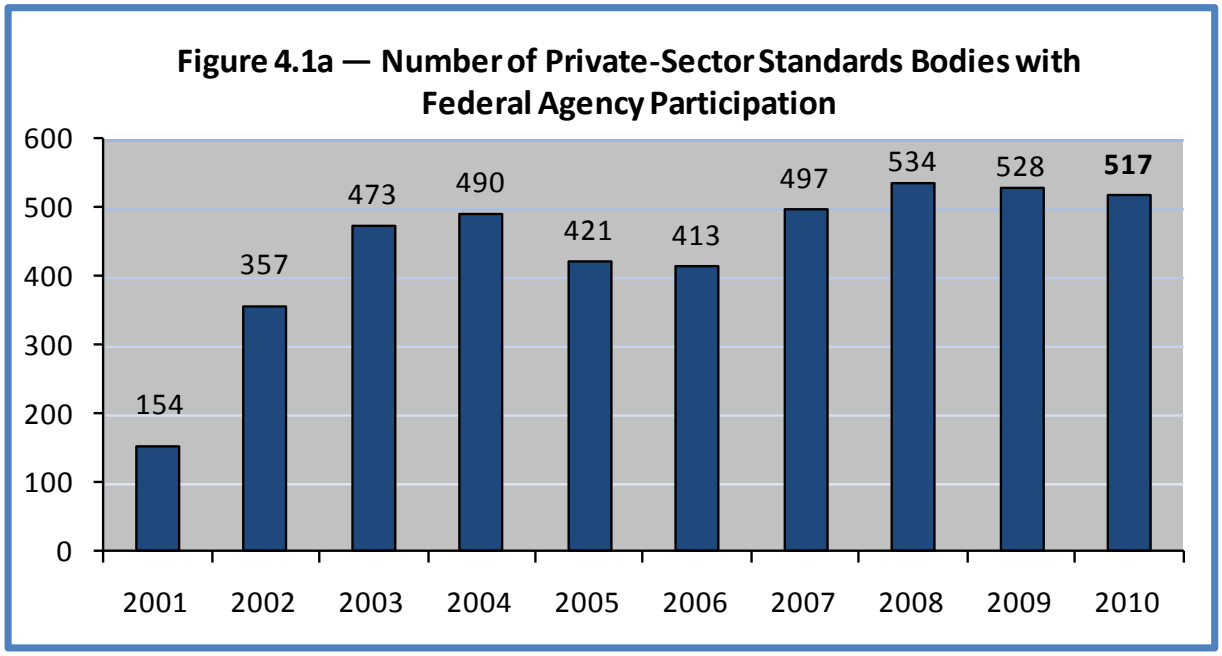
OMB Circular A-119 states that Federal agencies "must consult with voluntary consensus standards bodies, both domestic and international, and must participate with such bodies in the development of voluntary consensus standards when consultation and participation is in the public interest and is compatible with their missions, authorities, priorities, and budget resources." The Circular goes on to declare that "agency support provided to a voluntary

[1] GUSs being substituted include the universe of GUSs, i.e., those in use prior to the implementation of NTTAA reporting, those that are not "in lieu of VCSs", and those that are in lieu of VCSs. Since NIST began collecting data, there have been 3,263 reported substitutions of VCSs for GUSs across agencies. While we do not know the entire universe of GUSs, we know from published sources that DoD—the largest user of such standards— lists over 21,000 GUSs, counting military, Federal, and NATO specifications, and more than 8,600 private-sector standards. DoD adopted 7,400 private-sector standards before 1997.

consensus standards activity must be limited to that which clearly furthers agency and departmental missions, authorities, priorities, and is consistent with budget resources."

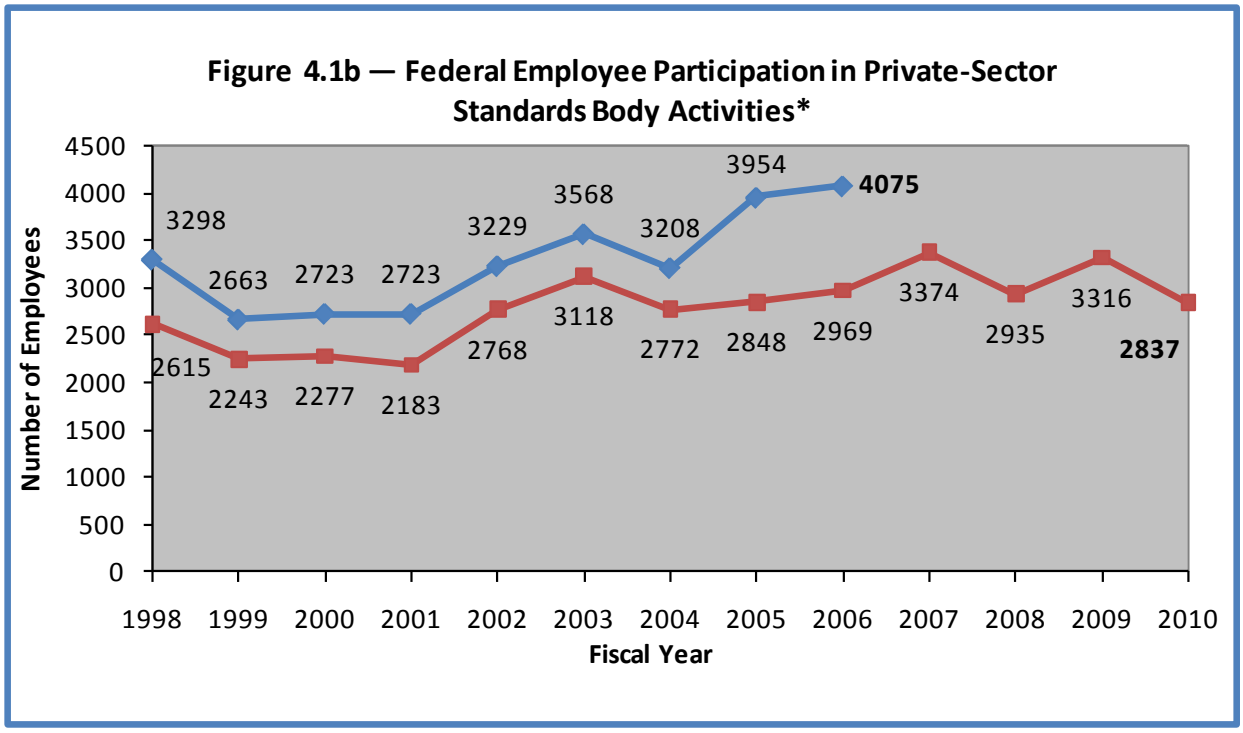
4.1 Participation Data for FY 2010

In FY 2010, agencies reported participation in 517 private-sector standards bodies compared to 528 in FY 2009 (see Figure 4.1a). The list of organizations includes VCS developers accredited by the American National Standards Institute (ANSI), other (non-ANSI-accredited) standards developers, industry and trade associations, international standards organizations, and consortia.



Federal agencies are also required by OMB to report the number of their employees who participate in private-sector standards body activities. This number includes not only those who serve on technical standards development committees, subcommittees, or workgroups, but also those who participate in management activities, annual meetings, or seminars.

In FY 2010, Federal agencies reported that 2,837 employees participated in private-sector standards body activities. While a decrease from the previous year, participation continues to remain above the annual average of 2,789 for reporting agencies. HHS has the largest number of staff participating in VCS standards body activities (922) followed by the Department of Energy (488). Figure 4.1b illustrates total Federal employee participation in private-sector standards body activities since FY 1998. Data detailing FY 2010 participation for each agency is provided in Appendix B. A complete listing of the standards-developing organizations in which Federal agencies participated can be viewed in the extended appendices to this report, located at http://standards.gov/NTTAA/agency/index.cfm.



* The upper series includes DoD data; 2006 is the last year that DOD reported staff participation in standards body activities. The lower series excludes these data.

5.0 Federal Agency Conformity Assessment Activities

The NTTAA requires NIST to coordinate Federal, State, and local government standards and conformity assessment activities with those of the private sector, with the goal of eliminating unnecessary duplication and complexity in the development and promulgation of conformity assessment requirements and measures. Federal conformity assessment activities are a means of providing assurance that the products and services regulated or procured by Federal agencies have the required characteristics and/or perform in a specified manner. Agency conformity assessment procedures may include sampling and testing; inspection; accreditation; certification; licensing; product listing; the submission to an agency of manufacturing, operational, and related data for review; manufacturer self-declaration of conformity to agency requirements; mandatory labeling and advertising requirements; establishment of national requirements which are then adopted/enforced at the State and local government levels; issuance of regulatory guidelines; pre-marketing approval requirements; post-marketing monitoring requirements; and conducting environmental impact assessments. NIST publishes directories and reports on conformity assessment-related issues and maintains a website (http://gsi.nist.gov/global/index.cfm/L1-5/L2-45) that provides conformity assessment information.

Numerous Federal agencies engage in conformity assessment activities and many use NIST's support[2] to help design and implement appropriate and effective conformity assessment programs. Some of the programs NIST supported during FY 2010 include:

Health IT - The Office of the National Coordinator for Health Information Technology (ONC) developed, in consultation with NIST, a temporary certification program for health information technology (health IT). The program provides a way for organizations to become authorized by the National Coordinator to test and certify electronic health record (EHR) technology. Use of certified EHR technology is a core requirement for health care providers to become "meaningful users" and eligible for payment under Medicare and Medicaid EHR incentive programs.

Body Armor Program - In cooperation with the Department of Justice's National Institute of Justice (NIJ) and the National Law Enforcement and Corrections Technology Center, NIST developed and implemented a significant enhancement to the current body armor certification program including a revised NIJ performance standard for the safety of law enforcement officers. Under the NIJ Body Armor Compliance Testing Program, 119 distinct body armor models have been listed on the NIJ Body Armor Compliant Products List.

Toy Safety - Through the Consumer Product Safety Improvement Act, the Consumer Product Safety Commission (CPSC), NIST and the private sector continue to develop model certification programs to address toy safety issues. CPSC successfully implemented their program utilizing existing conformity assessment schemes. Now over 329 laboratories are listed from 34 countries, accredited by 43 different accreditation bodies.

Smart Grid - Under the Energy Independence and Security Act (EISA) of 2007, NIST is developing a plan, in consultation with industry, government, and other stakeholders, for a testing and certification framework for Smart Grid related devices, systems, and processes. The framework will enable interoperability and security under realistic operating conditions. Additional information about Smart Grid activities can be found at http://www.nist.gov/smartgrid.

6.0 Evaluation of the Effectiveness of OMB Circular A-119

During FY 2010, the majority of reporting agencies either had no comment on the effectiveness of OMB Circular A-119 or indicated that they found the Circular effective in helping them manage their standards development programs. Presented below are individual agency comments and recommended changes to the Circular.[3]

[2] Under the NTTAA, NIST is responsible for coordinating conformity assessment activities of federal, state and local governments with those of the private sector

[3] It is within OMB's purview to consider and respond to these comments as appropriate.

Department of Homeland Security (DHS) - DHS organizations suggested that OMB use examples to illustrate points in the Circular, and ask for more guidance on when the use of GUSs is preferred over VCSs.

Department of Interior (DOI) – Organizations within the DOI suggested improvements including a request for NIST and/or OMB to identify high priority VCS and non-consensus standards for implementation by Federal agencies, especially standards that pertain to E-Gov initiatives and IT security requirements. Additionally, assistance was requested in interpreting the Circular on such issues as a perceived preference of international VCSs over national standards.

Department of Transportation (DOT) – DOT recommended that OMB Circular A-119 be revised to require NTTAA reporting only on instances of GUSs being used in lieu of VCSs, with the default position being that agencies are using VCSs for regulatory work as much as possible. The Circular should continue the policy cited in sections 6g and 9a of not requiring reports on GUSs developed where a VCS is unavailable.

Department of Agriculture (USDA) – The USDA recommended examining the effectiveness of the annual reporting methodologies. Specifically, the USDA would like to know who is using the information generated by individual agencies and whether it is useful and user friendly. It suggested providing a method to obtain user feedback and suggestions for changes to the report.

The full text of agency comments may be found in the *Addendum to the Fourteenth Annual Report on Federal Agency Use of Voluntary Consensus Standards and Conformity Assessment*, soon to be available online at http://standards.gov/NTTAA/agency/index.cfm.

7.0 The Interagency Committee on Standards Policy (ICSP)

During FY 2010, 58 individuals served on the ICSP, including agency Standards Executives, their alternates, NIST support staff, and a representative from OMB. The ICSP met three times in FY 2010. Two were joint meetings with the American National Standards Institute's Government Member Forum. Information concerning the ICSP, including membership, charter, and meeting minutes, may be found online at http://standards.gov/icsp/query/index.cfm.

8.0 Success Stories: Examples from Federal Agencies

Agencies and stakeholders throughout the Federal Government find substantial resource savings by leveraging the private-sector standards development process for government uses. Additionally, benefits flow to the private sector through Federal involvement and support of the VCS development process. As reported in FY 2010, agencies and affected constituents continue to realize significant benefits from Federal participation in the development and adoption of VCSs to support agency missions. Examples of successes include:

DHS through the US-VISIT program has been active in the development of biometric standards and the ANSI/NIST-ITL standard for iris capture cameras. In 2008, when the ANSI/NIST-ITL 2-2008 standard was first introduced, there were only five vendors of iris capture cameras. As a direct result of the new standard the number of vendors grew to 27 by 2010. This resulted in increased competition, giving rise to a larger selection of products with more features at a lower price. For example, hand-held iris capture cameras fell from approximately $12,000 to the $2,000 range and several camera vendors added a full-face image capture capacity to their product without a significant cost impact.

DHS's OIC adopted the EDXL-HAVE messaging standard which enables the exchange of hospital status, capacity, and resource availability/usage information among medical and health organizations and emergency information systems. Developed by OASIS, the standard was approved in 2009 as an OASIS Standard. EDXL-HAVE allows dispatchers and emergency managers to make sound logistical decisions, such as where to route victims, based on up-to-date information about nearby hospitals' availability and services. Emergency Operations Centers (EOCs), 9-1-1 centers, Emergency Medical Services agencies, and HHS use EDXL-HAVE to improve response to both day-to-day and major incidents. In 2010, earthquake relief personnel used EDXL-HAVE in Haiti to access data on hospital and health facility location, operating status, medical services, and capacity. Specifically, EDXL-HAVE's Extensible Mark-up Language (XML) schema allowed the data to be accessible by multiple devices including cellular phones, personal digital assistants and laptops. OIC conducted a case study of EDXL-HAVE's use in Haiti and determined the standard's flexibility and adaptability was well-suited to support the lack of infrastructure in Haiti, and was effective in sharing life-saving information.

The HHS's IHS provides health care to a service population of 1.9 million American Indians and Alaska Natives who reside in 35 states. IHS uses an EHR system based on interoperability standards developed by HL7. For FY 2010, the IHS reported that 247 facilities across the country used the RPMS electronic health record suite. In addition, RPMS is also used by the Community Health Network of West Virginia, which has RPMS EHR running at about 45 ambulatory clinics throughout the state. As early proof of the effectiveness of EHRs for public health surveillance, the IHS in collaboration with the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA), created a new public health reporting tool which used de-identified information from EHRs to provide near real-time surveillance of the H1N1 flu in American Indian/Alaska Native populations. The new system helped direct the distribution of limited supplies of H1N1 vaccine.

9.0 Summary and Conclusions

As of FY 2010, 14 years since the start of the NTTAA reporting requirement, Federal agencies report using only 48 government-unique standards in lieu of voluntary consensus standards. This small inventory reflects a real and continuing reliance on voluntary consensus standards. The NTTAA has successfully encouraged agencies to look first to VCSs and to engage with the

private sector standards system for solutions to government needs, rather than to develop GUSs unnecessarily.

Guided by the NTTAA and OMB A-119, NIST continues to assist Federal agencies and their stakeholders with standards and conformity assessment information, program support, guidance and policy concerns. NIST hosts the online portal http://standards.gov, which provides information related to Federal use of voluntary consensus standards and Federal engagement in the standards development process. Standards.gov offers background, materials, useful links, and search tools for locating information about the use of standards in government, including the searchable Standards Incorporated by Reference database. The website enables NIST to provide ongoing practical guidance, tools, and information needed by agencies to implement the NTTAA successfully as well as an electronic means to report standards activities as required by the NTTAA and OMB Circular A-119. In addition, NIST is working with agency standards executives and OMB to integrate standards participation and use more directly into the missions, decision-making processes, operating procedures, and strategic goals of Federal agencies. This report fulfills the annual reporting requirements of both the NTTAA and OMB Circular.

Appendix A: FY 2010 List of Reporting Federal Agencies

Agency	Acronym
Department of Agriculture	USDA
Department of Commerce	DOC
Department of Defense	DoD
Department of Energy	DOE
Department of Education	ED
Department of Health and Human Services	HHS
Department of Homeland Security	DHS
Department of Housing and Urban Development	HUD
Department of the Interior	DOI
Department of Justice	DOJ
Department of Labor	DOL
Department of State	DOS
Department of Transportation	DOT
Department of the Treasury	TRES
Environmental Protection Agency	EPA
General Services Administration	GSA
National Archives and Records Administration	NARA
National Aeronautics and Space Administration	NASA
Consumer Product Safety Commission	CPSC
Federal Communications Commission	FCC
Federal Energy Regulatory Commission	FERC
Federal Trade Commission	FTC
Nuclear Regulatory Commission	NRC
Government Printing Office	GPO
Access Board	ACCESS

Appendix B: FY 2010 Federal Agency Information on Participation/Adoption of Voluntary Standards Activities Required by OMB Circular A-119

Agency	Government unique standards used in lieu of VCSs	VCSs substituted for government unique standards	New VCSs used this year	Employee participation in VCS bodies	VCS bodies with agency participation
USDA	1	0	22	127	47
DOC	0	0	0	399	103
DoD	*	192	53	***	122
DOE	0	0	9	488	91
ED	0	0	0	24	4
HHS	1	0	63	922	197
DHS	0	0	13	128	42
HUD	2	0	0	9	5
DOI	0	0	2	166	84
DOJ	0	0	0	1	0
DOL	10	0	12	59	21
DOS	0	0	0	9	1
DOT	4	0	8	141	50
TRES	0	0	2	0	0
EPA	23	0	0	0	***
GSA	3	0	0	18	21
NARA	1	0	18	17	13
NASA	*	0	0	71	12
CPSC	2	0	2	30	9
FCC	0	0	0	28	14
FERC	0	0	19	0	0
FTC	0	0	0	0	0
NRC	0	0	6	184	15
GPO	0	0	2	7	4
ACCESS	1	0	0	9	6
Totals	48	192	231	2837	**

* Agencies reporting on a categorical basis per OMB Circular A-119, Section 12.
** Total not provided; includes duplicate counting due to participation in a standards body by more than one Federal agency.
*** Data not submitted.

Appendix C: FY 2010 New Government Unique Standards Used in Lieu of Voluntary Consensus Standards

Agency	**Department of Labor (DOL)**
Government Standard	29 CFR 1926 Subpart CC Cranes and Derricks in Construction [Incorporated 2010]
Voluntary Standards	ASME B30.2-2005; ASME B30.5-2004; ASME B30.7-2001; ASME B30.14-2004; AWS D1.1/D1.1M:2002; ANSI/AWS D14.3-94; BS EN 13000:2004; BS EN 14439:2006; ISO 11660-1:2008(E); ISO 11660-2:1994(E); ISO 11660-3:2008(E); PCSA Std. No.2; SAE J185; SAE J987; SAE J1063; ANSI B30.5-1968
Rationale	Sixteen voluntary consensus standards (VCS) were relied upon for the various provisions in the final rule, however, no single VCS is available to cover all varieties of cranes and derricks and their applications.
Agency	**Department of Transportation (DOT)**
Government Standard	Federal Motor Vehicle Safety Standard (FMVSS) No. 226, Ejection Mitigation (49 CFR 571.226; 49 CFR 585, Subpart K) (2011) [Incorporated 2010]
Voluntary Standards	SAE J2568—Intrusion Resistance of Safety Glazing Systems for Road Vehicles; BSI AU 209—Vehicle Security
Rationale	NHTSA studied the potential of applying these standards, but decided against adopting them for several reasons. These standards provide glazing intrusion resistance requirements from external impact (outside-in) as opposed to ejection mitigation (inside-out). Additionally, the requirements are not appropriate for vehicles with only side curtain air bags, given that there is a time dependence associated with a curtain's ejection mitigation performance. Once deployed, the pressure in the air bag continuously decreases. The 16 km/h test is done at 6 seconds to assure that the pressure does not decrease too quickly. It does not seem that the 40 mm gap test could be done after the 6-second impact, in any timeframe which is related to rollover and side impact ejections. Further, there was no shown safety need for applying the suggested standards. We cannot show that ejections that would not be prevented by the primary 100-mm displacement requirement would be prevented by a secondary 40-mm requirement. Also, it seemed that the 40-mm requirement would indirectly require installation of advanced glazing. The costs associated with advanced glazing installations at the side windows covered by the NHTSA standard are substantial in comparison to a system only utilizing rollover curtains. For these reasons, the agency did not accept the standards.

Agency	**Department of Agriculture (USDA)**
Government Standard	WILDLAND FIRE FOAM: GUS Number: 5100-307a; June 2007. Specification for Fire Suppressant Foam for Wildland Firefighting (Class A foam) [Incorporated 2010]
Voluntary Standard	NFPA 1150 - Standard on Fire-Fighting Foam Chemicals for Class A Fuels in Rural, Suburban, and Vegetated Areas.
Rationale	Foam fire suppressants contain foaming and wetting agents. The foaming agents affect the accuracy of an aerial drop, how fast the water drains from the foam and how well the product clings to the fuel surfaces. The wetting agents increase the ability of the drained water to penetrate fuels. Foam fire suppressants are supplied as wet concentrates. This standard was developed with international cooperation for Class A Foam used in wildland fire suppression situations and equipment. Standard was created by the USDA Forest Service in cooperation with the Department of Interior (DOI), the State of California, Department of Forestry and Fire Protection and the Canadian Interagency Forest Fire Center. The Forest Service has not chosen to utilize NFPA 1150 as it is designed specifically for application by municipal fire agencies in the wildland-urban interface, utilizing apparatus and situations that they are likely to encounter. The Forest Service's GUS for foam products is specific to use by wildland fire equipment and situations that are unique, e.g. helicopter use of foams, remote storage situations, and varied quality of water sources in the wildland settings. The agency feels this standard more accurately reflects the needs and mission of the federal wildland fire suppression agencies.