

I am writing these comments which I also shared with ANSI in my individual capacity, but as someone who has been involved with these issues for over three decades most of which were spent as the lead staffer for competitiveness and standards for the Committee on Science and Technology in the House of Representatives and specifically as the lead House staffer for the NTTAA and as someone who was actively involved in the revision of OMB Circular A-119. I have attached an article I wrote for MIT Press's Innovation which traces competitiveness including standards policy from the Ford through the Clinton Administration and which presented how I felt standards policy needed to change in 2006. I am pleased that in general the Obama Administration's actions related to standards fit well within this general framework. However, much still remains to be done.

General Background.

The US is unique in the extent that inclusivity is the defining characteristic of its standards policy. We have avoided top down standards and have developed the world's most democratic standards system which has ANSI at its core including being the organization which has defined what a voluntary consensus standard is and which represents the US in international fora. Therefore, I feel that ANSI, as the one organization that brings together everyone in the United States with an interest in standards, is uniquely positioned to assist the Subcommittee in its work. Its large membership and board of directors are drawn from every sector of the standards community including government agencies, companies and trade associations, standards development and accreditation organizations, public interest representatives, and other interested parties. The Institute oversees the creation, promulgation and use of thousands of norms and guidelines that directly impact every aspect of modern life. ANSI is also actively engaged in accrediting programs that assess conformance to standards – including globally-recognized cross-sector programs such as the ISO 9000 (quality) and ISO 14000 (environmental) management systems. ANSI is also the official U.S. representative to the International Organization for Standardization (ISO), the various regional standards and accreditation organizations, and, via the U.S. National Committee, the International Electrotechnical Commission (IEC). There are literally millions of people related to the ANSI Federation.

Through this memo I wish to advocate that your committee take the public/private partnership that ANSI represents to the next level and explore ways to make ANSI even more valuable to the government through full implementation of P.L. 104-113 including finally providing the Federal manpower and resources that are necessary to advance our country's common goals related to competitiveness of US industry, public health and among government and with the private sector as seamless as possible.

SPECIFIC ISSUES

1. Completing the implementation of PL 104-113.

Background: PL 104-113 and the subsequent related revision of OMB Circular A-119 established the policy that the government in its regulatory and procurement activities is to use voluntary consensus standards to the extent practicable and is to assure they meet government needs through active participation in all relevant standards development committees. A Secretary of Defense Bill Perry-inspired policy that required voluntary consensus standards to be used in Department of Defense procurement specifications was put in place early in the Clinton Administration to end the problem of absurdly expensive custom-made items being required rather than readily available commercial ones. PL 104-113 and the related revision of Circular A-119 to its current form were undertaken to extend DOD's standards practice throughout the government for purposes of regulation and procurement.

Although it was not written as broadly as the legislative intent, the OMB Circular A-119 revision which followed the enactment of P.L. 104-113 has stood the test of time. OIRA has integrated the requirement of a review of existing standards early enough into the regulatory development and review processes that existing standards are now routinely used in regulation. Commercial products are now also an integral part of Federal procurement. Yet very little has been done to fully implement the intent of PL 104-113 by making sure that pertinent, new voluntary consensus standards and revisions of existing standards are promulgated in advance of and incorporated into government regulations.

Under PL 104-113, the National Institute of Standards and Technology became the lead for Federal Government standards activities and chairs the Interagency Committee on Standards Policy. Because of the level of participants, these activities tend to be carried out on an implementation rather than a strategic policy level. The formation of your NSTC Subcommittee makes it timely to revisit the intent of PL 104-113 and to consider using an executive order to take care of unfinished business. I suggest an Executive Order because I think it would be a huge mistake to open up either PL 104-113 or OMB Circular A-119 to amendment. This is because establishing these positions in law and OMB Circular was a very difficult task in which we prevailed after several years of effort. Given that both the staff and Committee members who would have responsibility for these provisions are inexperienced and that there are many people out there who would like to change these laws to their own advantage, I think there is a real risk of the general provisions that the law and the circular lay out would be revised in a way that takes steps backwards. What needs to be done now is not to change direction, but to put the authority of President Obama behind a series of enhancements that can be carried out within the scope and intent of current law.

When PL 104-113 was enacted, the US standards development process following ANSI guidelines for fairness, openness, transparency, etc. was still relatively slow so it was a prudent use of limited resources initially to concentrate on US government use of existing standards in their current form and to defer consideration of how PL 104-113 and OMB Circular A-119 need also to be used to routinely encourage the revision of existing standards and the creation of new ones in advance of the promulgation of new regulations or major procurements. US standards development for years has been the best in the world because we bring in and fairly consider the technical views and standards needs of all interested parties. The results routinely have been far more robust than the top-down standards produced in most of the rest of the world. The drawback, using pre-Internet communications technologies, was that the process was time consuming.

This has changed. Both the standards development process and the use of standards are now digital and automated. The Internet, XML, and other software have speeded up the standards development process to where the best of the standards developers can get a standard from concept to promulgation in digital form in a matter of months with no decrease in quality and with a great increase in functionality. Standards now routinely are searched, are linked together, and are imbedded in design tools. If the government honors the intent of PL 104-113 and works with voluntary consensus standards developers from the beginning of the regulatory process, there is no reason why most regulations can't rely on completely up to date standards which have been customized to meet the needs of the regulators. My expectation is that this level of public participation in the standards embodied in regulation will also reduce the number and scope of law suits that too often delay the implementation of regulations because the engineering questions where the lawyers and courts lack expertise will have been decided by engineers in advance of considering the legal and political aspects of the regulations.

Standards are an important tool in our efforts to minimize the burden that government places on industry and to increase the ease with which federal government works with the other sectors of our society including state and local government. If the standards community is notified when Congress or an agency is taking the first steps to develop a new program or a new regulation and if appropriate resources are located to do the work, the best of the SDOs are now capable of becoming a full partner in improving these programs by making sure the technical standards on which a planned program or regulation will depend are created or updated before the regulation is scheduled to be finalized. This partnership can make sure the technical underpinnings of the standard or regulation are sound, given the current state of related science and technology, freeing the policy makers to concentrate on policy. Think about how much simpler the regulatory process would be if the technical issues are worked out in advance of the regulatory phase. Think how much simpler Health IT, the Smart Grid effort, or regulatory and siting efforts related to next generation of nuclear reactors or coal fired plants would be if the government, industry, and consumer representatives sat together in the relevant standards development

committees and worked together on an expedited basis on the standards and conformity assessment measures that underpin these programs before any regulatory activities began.

Recommendations: Put procedures in place that allow appropriate entities in the standards community to coordinate on standards development in advance of formal rulemaking. OIRA, assisted by NIST and the Subcommittee, could develop an executive order to complement OMB Circular A-119 that would establish the structure necessary to make sure that the best available standards are available for new regulations. This could include requirements that the agencies report to OIRA as part of the regulatory approval process not only on their review of existing standards but on their efforts to work with standards developers on making sure the existing standards are revised to make them fit government needs and new standards are developed as necessary to provide a complete standards basis for the regulation envisioned. This could include timetables, government employee participation in the standards development process, and efforts to make sure funding is available to avoid delay in standards promulgation. ANSI could be NIST's counterpart for private sector coordination including providing a gateway when it is not clear what SDO is best equipped to perform the work

2. Fully adopting the spirit of PL 104-113.

To understand the intent of A-119, it is important to realize that the statute in an important way is a precursor to the Obama Openness in Government initiative. Its authors looked at the success of the Department of Defense in using voluntary consensus standards to break down barriers between itself and the business community. By substituting voluntary consensus standards for military specifications, the Defense and commercial markets functioned under the same specifications and billions of dollars were saved. The authors thought about other areas of inefficiency where Federal rules arbitrarily differed from the private sector's and passed PL 104-113 to create a common playing field. Agencies like NIST were correct in interpreting the statute broadly; NIST began to use Federal Information Processing Standards as an exception rather than the rule and the Federal Government, especially after the rewriting of the Brooks Act was able to work out a common playing field on IT issues. This accelerated as ARPANET and NSFNET were subsumed in the Internet. Unfortunately, some agencies ignore the spirit of PL 104-113 and A-119 and read the OMB Circular's use of the term 'regulatory activities' very narrowly as limited to creating regulations or doing rule writing rather than considering its application to all activities that use standards to help the agency carry out its mission. For instance programs such as Energy Star will function much better if they are carried out by the public and private sectors on a common playing field; it is not just the regulatory aspects of the programs where the whole country needs to work together under common rules.

Recommendation. The Subcommittee, OSTP, OMB and affected agencies should consider not just the regulations but the programs that use them in the context of Openness in Government and A-119.

3. Federal employee participation in standards writing activity.

Background. The authors of P.L. 104-113 understood that common standards for the public and private sector would be effective only if they met the needs of both sectors. The best way to assure that government needs are met is to have government employees make their needs known and propose language that meets those needs during the drafting of the regulations. This is the reason why the language of P.L. 104-113 calls for more extensive agency participation in standards development activities which can include agency funding if agencies need standards more quickly than would happen under regular order. Since passage of P.L. 104-113, there appears to have been a reinterpretation of the Federal Advisory Committee Act in various parts of the Executive Branch that has led to differing interpretations of the Act and barriers to public private partnerships.

Recommendations. ANSI and its standards developing members should work with the Subcommittee on the development of government-wide policies encouraging more Federal participation in the development of standards of importance to the government and a revisiting of FACA-related policies in light of the importance at this point of expanding public private partnerships.

4. Status of Agency Standards Officers.

Background. Addressing the first three issues requires a determined focus on them within agencies at a cross-agency policy level by individuals at a high enough rank within the agencies to be taken seriously.

Recommendation. The Subcommittee Members should each be asked to investigate how the subcommittee recommendations will be carried out within their agencies and adjust the status of those involved to where they can be effective in the implementation.

5. Openness in Government

Background: Standards are the technical underpinning for openness in government and the Subcommittee with the support of NIST could play a key role in making sure this important initiative has the technical support it needs to be successful. NIST has experts in web 2.0 standards and provided government representatives to the standards writing committees that promulgated them. NIST also has been the secretariat for the CIO Council and is connected with the people who have to carry out these policies. Finally, for years NIST coordinated the development of Federal Information Processing Standards which before OMB Circular A-119's revision provided a common set of IT rules for government and still do to the extent that federal supplements to private sector IT standards are needed.

The Subcommittee is an important complement to NIST's work in this area because it brings together the high level officials that set the overall policy that the CIO Council and the FIPS help carry out. The Subcommittee is a logical area to think through what the government needs to do to set up common platforms to move towards seamlessness in public private interactions. Three examples of areas worth looking at follow.

The Subcommittee would be a logical place to think through improvement of gateways to the government that the rest of the country can use. Government websites vary from primitive to state-of-the-art. Within NIST there is also quite a spread of website functionality. NIST data bases connected with those of the American Chemical Society that have millions of hits per year; others go for years before being updated.

A couple years ago, it became clear to some in the federal standards community that the web had made obsolete most federal recurring reporting requirements. Rather than have the public wait a year for annual reports, it made much more sense to provide routinely updated information on web sites in electronic searchable form and so that interested parties could develop their own reports that were customized to their own needs.

Recommendations. Have the Subcommittee commission a study of best practices of Federal websites and requested development of a FIPS that lays out what is expected of agencies in making data bases accessible and as well as other on-line ways of sharing information. Have the Subcommittee commission a study of WIKI and other web 2.0 related technology would explore if there is a way to cut out the middleman in Federal reporting. This would involve letting let government employees, their grantees and contractors post and update information on a

particular topic in a setting that was monitored for quality, security, and accuracy, thereby providing the same type of instantly up to date information that is available today on other WIKIs. NIST and ANSI could also work together on migrating government coordination with its customers to the web in a manner that is consistent with the Open Government Initiative and standard ways that companies, universities, states, and others maintain their data. This type of web site could replace after the fact reporting requirements with a real-time look for the public on progress towards developing the standards necessary for major government initiatives such as smart grid or health IT. Although it is a tougher problem, there is a fortune to be saved if common standards for maintaining data related to government grants and contracts are developed for all programs that permit the government to mine the data as needed rather than requiring the contractors and grantees to write reports that quickly become dated.

6. Re-engineering Government/Lean Six Sigma

Background: At this point, it is pretty clear that quality (especially lean/six sigma) principles apply as much to the government and service sector as they do to the manufacturing sector. See <http://www.scienceprogress.org/2008/04/quality-and-ingenuity-are-intertwined/> where Maryann Feldman and I lay out the basic argument. For years, a Federal Quality Award, administered by OIRA, rewarded those government programs that best embodied quality principles. However, during the George W. Bush years, the Federal Quality Award was repurposed and made an award for those agencies that did best under the GPRA process, thereby making the FQA an excellence in bureaucracy award rather than a quality award. The quality portion of the award was effectively suspended and the OIRA staff that was OMB's repository of quality expertise was dispersed. Ironically that same Administration in its response to Hurricane Katrina unintentionally demonstrated just how important quality training is in the public sector. FEMA, perhaps the ultimate bureaucracy under Bush II, was clueless when the big storm hit. The Coast Guard, on the other hand, an agency that had emphasized quality training and meeting the needs of its customers and is the home to many six sigma black belts, performed flawlessly, conducting hundreds of successful emergency rescue and other operations under the same conditions that FEMA faced.

Lean Six Sigma presents a unique opportunity for the Obama Administration to promote both efficiency in government and openness in government. Its strong focus on the needs of internal and external customers and its heavy focus on reengineering and heavy use of IT to meet the needs of customers provides a systematic means of implementing much of what the Obama Administration hopes to accomplish in these areas. Openness in government will also be much easier if the government operates under the same lean/six sigma standards as the private sector and can tie in as appropriate into supply and value chains. The ultimate in openness in government will be when the Federal government can operate seamlessly with those who depend

on it and its services including delivering approvals and regulatory services real-time and always in advance of when they are needed.

The Malcolm Baldrige National Quality Award, headquartered in NIST, since the mid-1980s has functioned as a national standard for best business practices. Three or four years ago it was extended to the non-profit sector including government at all levels and now the award guidelines are the standard for optimization in all parts of the economy and for how individual companies, universities, non-profits, or government agencies can best interface with all of their customers and clients. The Baldrige Award has always functioned as the Super Bowl of quality. Winners of the award spend years honing their quality by implementing Baldrige principles and by competing for state and other lesser quality awards. It is designed to reward the cream of the crop in quality and this should be so in the public sector as well as in the private sector.

Recommendation: The Subcommittee could advocate for the implementation of Lean/Six Sigma throughout government, revival of the Federal Quality Award program, and use of Malcolm Baldrige National Quality Award measurement tools as a way to bring the government in step with the national quality standard. It could show that it is serious about openness and efficiency in government by promoting an executive order to create chief quality officers within all agencies, preferably in agency front offices. This would both show that the Administration is serious about improving the functioning and efficiency of government and that the White House and agency heads expect quality and continuous improvement to be hallmarks of government as well as of leading companies. In some cases the chief quality officer title could be added to the existing responsibility to existing officials. The chief quality officer would be the quality facilitator in their agencies, encouraging all parts of the agency to adopt quality principles. I recommend reestablishing the Federal Quality Award to honor the best portions of agencies and requiring a FQA for government entities to compete for the Baldrige. FQA might also be open to state programs that use federal funds to implement Federal policy.

7. Standards are also important in bringing various levels of government together. For instance, if we are serious about regional economic development we need a set of standards that let state and local government, federal agencies, universities, and local businesses to work together seamlessly and get permits and regulatory approval just in time.

Jim Turner

Jim Turner, Senior Counsel and Director of Energy Programs
Association of Public and Land Grant Universities
1307 New York Avenue NW, 4th Floor
Washington, DC 20005

jameshturnerjr@gmail.com

[202-478-6049](tel:202-478-6049) APLU

[202-684-5580](tel:202-684-5580) cell

[703-534-0445](tel:703-534-0445) home

[703-891-9432](tel:703-891-9432) efax