

Response of the Alliance of Telecommunication Industry Solutions to Request for Information of the National Institute of Standards and Technology concerning the Effectiveness of Federal Agency Participation in Standardization and Conformity Assessment Activities

The Alliance for Telecommunications Industry Solutions (ATIS) submits this response to the December 8, 2010, Request for Information of the National Institute of Standards and Technology (NIST) in Docket No 0909100442-0563-02, concerning the effectiveness of federal agency participation in standardization and conformity assessment activities.

For the reasons discussed below, ATIS, based on its close to thirty (30) year history as a US-based standards development organization (SDO) and the direct involvement of federal agencies in ATIS's work efforts, respectfully submits that:

- Federal agencies have effectively participated in the private development of standards in the United States.
- Great caution should be exercised not to disrupt industry standardization efforts, because the consensus-based processes followed by SDOs such as ATIS have successfully addressed public policy initiatives. ATIS, for example, is already pursuing important projects relating to Smart Grid, machine-to-machine, Cloud Services, sustainability, lawfully-authorized electronic surveillance, commercial mobile alert system, and network reliability. ATIS' success in pursuing these and other projects, including those with significant public policy implications, has occurred as the result of ATIS's ability to react to industry needs and government requirements. ATIS' long-established intellectual property policy, which is based on the policy of the American National Standards Institute (ANSI), also has allowed for the effective and timely development of ATIS standards and deliverables.
- Further coordination by federal agencies with, and participation in, SDOs, including ATIS, should be encouraged, but with the understanding that existing private sector processes and procedures allow for such coordination and participation on an effective level.

I. Background

ATIS is a global standards development and technical planning organization committed to providing leadership for, and the rapid development and promotion of, worldwide technical and operations standards for information, entertainment, and communications technologies. ATIS has been pursuing such efforts since its establishment in 1983 under its prior name, the Exchange Carriers Standards Association (ECSA), and has expanded the scope of its activities and membership from those originally focused on traditional wireline telephone technologies to its current work on all manner of technologies.

Thus, ATIS's membership is now diverse, including wireline and wireless service providers, equipment manufacturers, competitive local exchange carriers, data local exchange carriers, providers of commercial mobile radio services, broadband providers, software developers, consumer electronics companies, digital rights management companies, and internet service providers. Many, if not most, of these companies are global in nature.

Industry subject matter experts from more than 200 organizations, including a number of federal agencies and local governmental authorities, actively participate in ATIS' open technical committees and forums. ATIS is an ANSI-accredited standards developer, but its deliverables go well beyond the development of American National Standards. The output of ATIS' committees and forums include all manner of standards, technical specifications and requirements, best practices, interoperability testing, guidelines, white papers, and technical analyses. These deliverables focus on a broad range of information and communications technology (ICT) priorities, including network architectures and platforms, the ordering and billing of services, E-911 and NG911, cyber security, the reliability and interoperability of current and next generation of technologies, the seamless delivery of converged wireline and wireless services such as IPTV over multimedia platforms, and the networks of the future.

ATIS and its committees/forums also actively engage in the larger global standards ecosystem. ATIS is a large US contributor to the International Telecommunication Union Telecommunication Standardization Sector (ITU-T), the UN-based treaty organization that, among other things, establishes specifications that foster international interconnection between communications systems. ATIS is also a founding organizational partner of the 3rd Generation Partnership Project (3GPP), which brings ATIS together with the leading ICT SDOs from Europe, Japan, Korea and China to develop mobile communication standards. ATIS is likewise a founding member of the Global Standards Collaboration (GSC), an initiative of leading global ICT SDOs that promotes the international harmonization of communication standards.

II. The Effective Participation of Federal Agencies in ATIS Activities

ATIS' success in developing effective and implementable standards and other deliverables is due, at least in part, to the participation of both private sector and governmental stakeholders in ATIS committees and forums. Representatives from the following federal agencies have all participated in ATIS' activities: the National Communication System; Department of Defense; Federal Bureau of Investigation; Federal Communications Commission; Department of Homeland Security; and Department of Commerce, through NIST and NTIA. Such participation is encouraged by the National Technology Transfer and Advancement Act of 1995, Public Law 104-113 (NTTAA), as well as by the Office of Management and Budget (OMB) Circular A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards in Conformity Assessment Activities.

ATIS has had specific success as the result of the private/public coordination encouraged by the NTTAA and OMB Circular A-119. One such example involves the Commercial Mobile Alert System (CMAS), which allows participating commercial mobile service providers (CMSP)

to send emergency alerts to customers' mobile devices. Private stakeholders, together with representatives of, among others, the Federal Communications Commission, Department of Homeland Security, and the Federal Emergency Management Agency, worked through ATIS (in conjunction with the Telecommunications Industry Association (TIA), another SDO) expeditiously and cooperatively to develop a standard needed to implement the CMAS interface between the commercial mobile service provider and federal alert gateways. In addition, further coordinated efforts were undertaken and completed to develop a test specification to define the operational testing procedures for this interface between the gateways.

Other examples of such private/public coordination within ATIS can be seen in its Network Reliability Steering Committee (NRSC), which develops guidelines and best practices to foster the reliability of communications systems. The FCC and NRSC actively cooperate to identify and examine causes of outages and to develop recommendations that may reduce or mitigate future outages. Active cooperation also exists between ATIS' Industry Numbering Committee (INC) and the FCC's North American Numbering Council (NANC) Federal Advisory Committee, which work cooperatively to identify issues pertaining to the management of telephone numbering resources within the North American Numbering Plan.

ATIS deliverables have also been adopted by federal agencies consistent with the NTTAA's principle that government agencies should use private industry-developed standards in lieu of developing specific governmental standards. There are many examples of ATIS standards being used or referenced by federal agencies, for example:

- The FCC requires the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) to comply with the guidelines developed by the ATIS INC Guidelines (47 CFR § 52.13(b)(3)).
- In developing rules pertaining to the exchange of customer information between service providers, the FCC acknowledges the successful work of the ATIS Ordering and Billing Forum (OBF) in developing Customer Account Record Exchange (CARE) guidelines and encourages providers to use these guidelines and to work with the OBF to further develop and refine them. (*See Report and Order and Further Notice of Proposed Rulemaking*, CG Docket No. 02-386, at ¶ 59 (rel. Feb. 25, 2005).
- The Communications Assistance for Law Enforcement Act, Public Law 103-414, also acknowledges industry standards by establishing that service providers may rely on industry-developed standards when determining compliance with CALEA. One such "safe harbor" standard is ATIS's standard titled "Lawfully Authorized Electronic Surveillance (LAES) for Voice over Packet Technologies in Wireline Telecommunications Networks (ver. 2)." Another "safe harbor" standard is the joint TIA/ATIS standard for "Lawfully Authorized Electronic Surveillance."
- As described above, the Department of Homeland Security (DHS) approved the "Joint ATIS/TIA Commercial Mobile Alert System (CMAS) Federal Alert Gateway to Commercial Mobile Service Provider (CMSP) Gateway Interface Specification" as a DHS National Standard.

The Federal government has also collaborated with ATIS through the funding of joint projects. One such project was the National Diversity Assurance Initiative, a collaborative effort between ATIS and the Federal Reserve to provide an in-depth assessment of the feasibility of validating the existence of diversity on critical NS/EP circuits and to identify methods to assure that the diversity is maintained on those circuits over time. The project resulted in the publication of a final report in February 2006 describing both the lessons learned and recommendations for additional work. A follow-on project, known as the Diversity Assurance Initiative, was a collaborative effort between the ICT industry and the National Communications System to evaluate and scope potential solutions for diversity assurance in a multi-carrier environment.

Given the success of the involvement and coordination of private standards development and federal agencies, ATIS submits there is no need to develop a new point of contact within the government to coordinate the US government's standards policy or activities. In addition, such a new office would be duplicative of the existing Interagency Committee on Standards Policy (ICSP), acting under the auspices of NIST. ICSP already effectively brings together the standards offices of numerous federal agencies to discuss standards issues of interest and/or concern to those agencies. It also addresses best practices on the part of federal agencies with the current standards process. Further, ICSP participates in meetings of organizations such as ANSI to keep the standards development community informed of issues and to suggest improvement to the system. The ICSP is a working example of the existing effective public/private industry partnership. Adding another layer of governmental involvement would only increase costs and slow innovation through standardization.

Similarly, the increasingly global nature of standardization does not compel a modification of the existing approach for coordinating the public and private interests in standards development. There continues to be effective representation of US standardization interests in the development of international standards, and in the harmonization of US and international standards. Moreover, SDOs such as ATIS have dynamically adjusted to international developments to ensure that the interest of ATIS' members, including agency stakeholders, and industry in general, are continuously addressed internationally.

III. The Current Voluntary, Consensus-Based Standards Approach Followed by ATIS Should Not Be Modified

The open, voluntary, consensus-based standardization approach followed by ATIS and other SDOs has had great success. This is attributable to a number of factors. Perhaps most importantly, the current private standards environment allows for a wide range of stakeholders' interests to be accommodated, and for standardization decisions to be based on the consensus of such stakeholders. This includes the interests of federal agencies through their representatives participating in the standards development efforts of SDOs such as ATIS.

ATIS has also been responsive to the dynamic nature of standardization. Over its history, ATIS has evolved from the paradigm of developing “standards for standards sake” to one focused on “standards for business sake.” As a result of this shift, ATIS has been able to quickly react to industry and public policy priorities, and create standardized solutions in important areas of emerging technologies.

ATIS’ activities in relation to the Smart Grid illustrate its effectiveness. As the implementation of Smart Grid became a national priority, ATIS took two actions to facilitate standardization on this issue. First, ATIS identified existing standards, as well as 3GPP wireless technologies, that would be applicable to Smart Grid applications. ATIS also worked closely with federal agencies, including NIST, to ensure that they were aware of relevant industry work. In fact, ATIS has been named as a collaborator by NIST in its Framework and Roadmap for Smart Grid Interoperability Standards. Second, ATIS began to examine its standardization work to determine what needs to be done to facilitate Smart Grid applications. As part of this effort, ATIS has also undertaken an initiative as part of its Board of Directors’ Technology and Operations Council (TOPS) to examine the interrelationship between key machine-to-machine applications, including Smart Grid, to identify the need for new standardization efforts.

IP-based television (IPTV) is another example of how the existing standardization approach followed by ATIS is effective in reacting to new technologies. As the industry began to consider IPTV, ATIS formed a new committee, the IPTV Interoperability Forum (IIF), to examine issues surrounding the interoperability, interconnection, and implementation of IPTV systems/services. ATIS has been on the forefront of global standardization work on this issue, with ATIS’ work serving as the basis for other international standardization efforts on this topic.

ATIS’ collaborative and consensus-based approach has likewise been effective in directly addressing policy issues. ATIS has thus successfully identified specific issues that are at the crossroads of technology and policy and in ensuring that all appropriate stakeholders have an opportunity to work together in a collaborative environment. One example of this is reflected in ATIS’ work regarding the hearing aid compatibility (HAC) of wireless devices. All stakeholders, including service providers, equipment manufacturers, academic organizations, and representatives of consumers with hearing loss, collaborated under ATIS’ consensus-based processes to develop recommendations for changes to the FCC’s HAC regulations to ensure that these regulations were technology-neutral and technically feasible and would allow all consumers to benefit from the availability of cutting edge products and service offerings.

An attempt to “fine tune” the existing US approach to standardization would risk inhibiting the ability of ATIS, and other SDOs, to continue effectively addressing industry and policy initiatives in a timely fashion. Such a government led “top down” approach, as distinct from the current private/public “bottom up” collaborative approach, would limit ATIS’ ability to react to changing industry priorities and quickly evolving technical developments. Such an approach would, in all events, slow ATIS’ ability to address important standardization issues by binding ATIS to an agenda established by regulatory authorities that may not have direct involvement with the actual technological issues at stake, and not by consensus of interested

stakeholders. This, of course, is not meant to suggest that there should be any less involvement of agency input into the setting of standardization priorities (and as discussed below, ATIS suggests that such participation should increase), but such involvement is best focused through the existing approach. This position is consistent with the nearly unanimous views expressed in the *National Survey of United States Standardization Policies* (August 2009), which found that “current United States policies for the development of private-sector technology standards are working well, and that no changes to those policies or the current balance of private sector/public sector partnership relating to standards are necessary at this time.”

Nor is it ATIS’ experience that any change in the current standardization approach is necessary because of intellectual property issues. ATIS’ IPR policy is modeled on the ANSI policy, and seeks the disclosure of IPR that may be essential to a standard, and for owners of essential IP to provide licensing undertakings stating their willingness to make licenses available. This policy has worked well for ATIS, which has experienced no instances where IPR has delayed or precluded the development of an ATIS standard or its implementation. This includes with respect to those standards developed for implementation by federal agencies or pursuant to agency direction.

IV. Increased Agency Involvement in ATIS Activities Would Be Beneficial

Greater participation of federal agency representatives in ATIS’ activities, and the coordination of agency priorities through ATIS, would be beneficial to the industry and to federal agencies. So long as the existing collaborative, open, consensus-based approach that ATIS has always followed remains undisrupted, such participation would increase the understanding of both the private and public sectors. Such greater agency involvement would allow agencies to reflect industry expertise in the setting of their priorities and would present opportunities for collaborative work that would leverage the efficiencies of ATIS’ standard setting activities. It would also allow industry to benefit from, and be responsive to, agency identified issues and to take advantage of the subject matter experts that work in federal agencies.

V. Conclusion

For the reasons set forth, ATIS respectfully submits that current federal agency involvement in standards development is effective. Benefit, however, may arise from even more such involvement, but with the understanding that it is necessary to maintain, and not compromise, the existing consensus standardization approach followed by ATIS. This approach has allowed for tremendous successes, including in relation to standards development directed by or to address, federal agency interests, and no steps should be taken that would compromise or constrain such existing efforts.