## Before the National Institute of Standards and Technology Gaithersburg, MD 20899

*In re* Request for Information on Implementation of the United States Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET)

Docket Number: 230818-0199

# COMMENTS OF THE ALLIANCE FOR TELECOMMUNICATIONS INDUSTRY SOLUTIONS

The Alliance for Telecommunications Industry Solutions (ATIS) submits this response to the Request for Information released by the National Institute of Standards and Technology (NIST) soliciting input to "support the development of an implementation plan for the United States Government National Standards Strategy for Critical and Emerging Technology" (Standards Strategy).<sup>1</sup> ATIS commends the Administration's recognition that private sector-led, voluntary, consensus-based standards are crucial to innovation, economic growth, and national security and that this approach to standardization has played – and continues to play – a key role in driving U.S. technology and innovation leadership, particularly in the information and communications technology (ICT) sector.<sup>2</sup> Early and regular engagement with industry is essential to mitigating the risks of unintended consequences from U.S. Government actions. As the leading developer of technical, operational, and strategic standards for the North American ICT industry, ATIS is well-positioned to work with the U.S. Government through NIST to support the

<sup>&</sup>lt;sup>1</sup> See Request for Information on Implementation of the USG NSSCET, 88 Fed. Reg. 61527 (September 7, 2023); see also United States Government National Standards Strategy for Critical and Emerging Technology (May 2023), available at <u>https://www.whitehouse.gov/wp-content/uploads/2023/05/US-Gov-National-Standards-Strategy-2023.pdf</u>

<sup>&</sup>lt;sup>2</sup> Standards Strategy at 8.

Standards Strategy's stated goal "to reaffirm and strengthen [the U.S.] private sector-led approach to standards development..."<sup>3</sup>

## I. Background

#### A. About ATIS

ATIS is a leading U.S.-based organization developing standards and other technical deliverables for the ICT sector. Through its decades-long existence, ATIS has played and continues to play a critical role in advancing many of the critical and emerging technologies (CET) and applications specifically identified by the Standards Strategy. ATIS members, which come from all segments of the ICT sector,<sup>4</sup> collaborate and innovate to develop much-needed technology and wide-ranging solutions to address the industry's toughest challenges. Current ATIS projects, for example, include cellular technologies (5G, 6G, and beyond), quantum, cybersecurity, smart cities, uncrewed aerial vehicles (UAVs), artificial intelligence-enabled networks, distributed-ledger (or blockchain) technologies, user-controlled privacy using self-sovereign identity, and artificial intelligence network applications.

ATIS is also the North American nexus for global collaborations to support nextgeneration technology leadership. ATIS is the North American Organizational Partner in 3GPP, a global project that unites ATIS and six other regional Standards Development Organizations (SDOs) to produce technical specifications for constantly evolving generations of mobile telecommunications standards, including 5G and 5G Advanced standards now being implemented in the U.S. and worldwide. Technical specifications developed in 3GPP are transposed by the Organizational Partners, including ATIS, into national standards in each

 $<sup>^{3}</sup>$  *Id.* at 14.

<sup>&</sup>lt;sup>4</sup> ATIS members include wireless and wireline service providers/network operators, cable operators, equipment manufacturers and suppliers, content, and applications providers, as well as U.S. governmental agencies.

Partner's respective region. Wireless communications specifications developed in 3GPP are fundamental to and overlap with many of the CET areas identified in the Standards Strategy, including Artificial Intelligence, Quantum Information Technologies, the IoT, and Automated Transportation.<sup>5</sup>

ATIS formed the Next G Alliance (NGA) in 2021 to promote North American leadership in 6G.<sup>6</sup> With a strong emphasis on 6G commercialization, the work of the NGA encompasses the full lifecycle of research and development, manufacturing, standardization, and market readiness. The NGA continues to play an instrumental role in providing strategic direction regarding 6G. from its NGA Roadmap, which provides a 6G vision for North America, to recent efforts to promote U.S. investment in research and development through public private partnership.

#### **B.** Introduction

The private sector-led, voluntary approach to standardization continues to be highly effective at promoting the most technologically innovative solutions and advancing U.S. competitiveness worldwide. As the Standards Strategy recognizes, leading SDOs, including ATIS, have robust and effective policies and practices that create opportunities for all interested parties to benefit from the broad dissemination of CET and to build products and services based on such technologies.<sup>7</sup> Importantly, these policies and the related procedures (and the voluntary nature of standards adoption) work to prevent parties from successfully promoting unwanted or

<sup>7</sup> For example, both ATIS and 3GPP operate in accordance with the key standards principles set forth in ANSI's U.S. Standards Strategy. *See* ANSI, *United States Standards Strategy* (2020), at 8-9 (identifying "globally accepted principles for standards development," including transparency, openness, impartiality, effectiveness and relevance, consensus, performance based, coherence, due process, and technical assistance), *available at* <u>https://share.ansi.org/Shared%20Documents/Standards%20Activities/NSSC/USSS-2020/USSS-2020-Edition.pdf</u> ("ANSI Strategy").

<sup>&</sup>lt;sup>5</sup> Standards Strategy at 6-7.

<sup>&</sup>lt;sup>6</sup> See <u>https://nextgalliance.org/</u>

less-innovative standards through undue pressure or influence. By and large, the voluntary private sector-led model has proven resilient to such challenges.

As the Strategy points out, the U.S. Government has long supported the private sectorled, transparent approach to standards development built on market-driven outcomes.<sup>8</sup> It is also true that other governments (including some of our closest trading partners) have recently moved towards standards policies that are more "top-down" creating challenges for the private sectorled model. But the strongest defense against overreach by other governments into the proper role of industry is the U.S. Government's steadfast support of the private sector-led standards model. The U.S. Government rightly acknowledges that it must renew its commitment to such standards development and to the important complementary role the public sector must play in adopting strategic economic policies and advocating for voluntary, private sector-led standards.<sup>9</sup>

In recognition of this, the most important steps that the U.S. Government can take to support the private sector-led model are: (i) continuing to lead by example through technical participation in relevant standards bodies; and (ii) proactively advocating in international venues to support and protect the private-sector led model of voluntary standards development. Beyond such leadership, ATIS believes that the U.S. Government can best strengthen the role of domestic interests in technology standards by following through on the commitments it has made to fund pre-standardization R&D across industry and academia for emerging technologies and through targeted policies to support greater participation and leadership by U.S.-based companies in international standards processes.

<sup>&</sup>lt;sup>8</sup> *Id.* at 3 ("The U.S. Government has long engaged in these standards development processes through an approach built on transparency, private sector and public sector leadership, and stakeholder engagement—a process that reflects the United States' commitment to free and fair market competition in which the best technologies come to market.").

<sup>&</sup>lt;sup>9</sup> *Id.* ("The United States must renew our commitment to the rules-based and private sector-led approach to standards development and complement the innovative power of the private sector with strategic government and economic policies, public engagements, and investments in CET").

With respect to the first point, the U.S. Government can lead by example through engagement as a participant in key standards development processes. For example, the Strategy notes the U.S. Government may have unique perspectives on topics of security. Active and consistent participation in standards processes is the most effective way to ensure those perspectives are fully represented in standards development while simultaneously reinforcing government's support for the private sector-led model. This is particularly important in intergovernmental organizations that develop technical standards, such as the International Telecommunication Union.

Second, the U.S. Government's international engagements in support of the private sectorled approach to standards development is critical given what the Strategy appropriately recognizes are pressures being placed on voluntary standards development by policies and actions of other countries. The U.S. Government should utilize available diplomatic means, including trade agreements and arrangements, economic partnerships, etc., to ensure that international partners do not "undermine the integrity of longstanding standards development processes" or create fragmentation in standards by imposing top-down, government-driven approaches.<sup>10</sup>

Third, any long-term efforts to drive U.S. leadership in standards will falter if the U.S. is not competitive with other regions of the world in supporting pre-standardization R&D. As the Strategy appropriately recognizes, standards "are substantially driven by technical contributions that flow from R&D, and greater U.S. investment in pre-standardization research and analysis helps facilitate contributions to standards-setting discussions."<sup>11</sup> The ICT industry is particularly reliant on private sector-led research to drive innovative commercial solutions.

<sup>&</sup>lt;sup>10</sup> Id. at 12.

<sup>&</sup>lt;sup>11</sup> Id. at 8.

Congress and the Administration recently acknowledged the importance of government support for transitional R&D in passing the CHIPS & Science Act, as well as in the creation of NSF's Directorate for Technology, Innovation and Partnership (TIP). Nonetheless, in failing to fully fund the research programs authorized by CHIPS & Science, the U.S. is risking falling behind in an increasingly competitive international race to lead in technology innovation. The U.S. Government can thus support the private sector-led standards model via increased investment incentives created by tax and other policies to support the allocation of resources, including staffing, to standards development, and direct funding for CET research and development, particularly for pre-standardization and transitional research. NSF's Resilient and Intelligent NextG Systems (RINGS) and Platform for Advanced Wireless Research (PAWR) programs are recent examples of direct U.S. Government in innovation, but those efforts have been relatively limited compared to those of in other countries.<sup>12</sup>

Fourth, U.S. Government can take targeted policy steps to support increased participation and leadership in international standards efforts. Based on our experience, ATIS urges the U.S. Government to focus on steps that can lower cost and access barriers to participation in standards development processes, including by facilitating the hosting of standards meetings in the U.S. Trade, export control, and visa and immigration policies should be reviewed to ensure they are aligned with a strategy that advances private sector-led voluntary standards development. Meaningful participation in standards requires a significant commitment of resources for any company, particularly smaller ones. Additionally, the Administration has expressly recognized that hosting standards meetings in the U.S. enables broad participation<sup>13</sup> and is important to showing commitment to the private sector-led model. But the cost of hosting such meetings and U.S. visa

<sup>&</sup>lt;sup>12</sup> See https://www.nsf.gov/cise/advancedwireless/

<sup>&</sup>lt;sup>13</sup> Standards Strategy at 10.

policies that limit the ability of participants from other countries to enter the country have led to more and more standards meetings being held in Europe and China at the expense of the U.S.

Lastly, U.S. Government support for the private sector-led standards model requires that it engage with industry as a partner in these efforts. This includes ensuring that U.S. Government speaks with a consistent standards policy voice through NIST as the "standards expert agency" as appropriate. It also requires that before taking any action to "strengthen" the current U.S. private sector-led approach to standards development, U.S. Government must clearly identify the concerns that need to be addressed and engage early and regularly with industry on proposed solutions to avoid unintended consequences. Finally, it would be helpful for agencies to engage earlier with industry on technical standards they intend to propose to help the private sector better understand and align with such proposals where and when appropriate.

## II. DISCUSSION

#### A. Responses to General Questions

*1. Are there potential benefits, opportunities, or risks associated with increased U.S. participation in standards development activities for CET?* 

2. What are the potential risks or implications of decreased U.S. participation in standards development activities for CET?

3. What are the most important challenges faced by the private sector (i.e., industry, including start-ups and small- and medium-sized enterprises (SMEs), academic community, and civil society organizations) when participating in standards development activities for CET, and how can these challenges be addressed?

#### **Benefits of Increased U.S. Participation**

As discussed, the U.S. Government plays a key role in ensuring the continued success of private sector-led voluntary ICT standards development. To understand the value of increased U.S. participation in standards, it is important to appreciate the critical role that private sector-led voluntary standardization plays in creating global markets and a more competitive and secure

landscape for technology-dependent goods and services. Global technology and ICT standards are the foundation of a transparent, open, and competitive ecosystem and a key step in bringing new interoperable technologies to the mass commercial market, creating significant value across the entire ICT ecosystem. Businesses can reduce the economic risk of new product or service development by participating in standardization.

ICT standards support the cost-effective, timely delivery of interoperable products and services to the marketplace to meet the needs of users of new technologies and services. Standardization also facilitates entry by new and diverse firms – including SMEs – as technology innovators and implementers. This drives innovation and reduces costs throughout the standards ecosystem as new technologies are made available for standardization and new standardized products are introduced. Private sector-led standards thus play a key role in expanding the ICT supply chain and ensure vendor diversity, all of which redounds to the benefit of consumers. Supporting such outcomes is fundamental to maintaining the robustness of the U.S. economy and its competitive stance in the global marketplace.

Private sector-led standards also play a vital role in ensuring U.S. technology leadership. Internationally recognized standards establish harmonized foundational concepts, reduce fragmentation, facilitate technical interoperability between diverse systems, and promote responsible operational and management practices. As described more fully below, ensuring continued U.S. leadership in the development of emerging technologies will require encouraging and strengthening participation by U.S.-based companies in standards bodies such as ATIS and safeguarding the existing private sector-led, voluntary, consensus-based model that has proven so successful and beneficial for U.S. industry and consumers.

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Participation in standardization efforts allows the U.S. Government to share with industry needs and concerns regarding important matters of national security, cyber protection, and economic competitiveness and innovation. Historically, this has been an important role for the U.S. Government, and it should continue. It advances private sector investment in innovation that has strategic significance, and the U.S. Government directly benefits from industry's technical input. For example, U.S. Government participation in 3GPP, ISO/IEC, and ITU-T standards activities has advanced the development of security standards that are relevant to both U.S. Government and U.S. private sector interests.<sup>14</sup>

Thus, the U.S. Government should devote resources to support direct and consistent participation by the public sector in the actual development of voluntary standards. U.S. Government experts' participation should be funded for multiple years so there can be consistent participation by the government. ATIS' approach to standards development through open, balanced, consensus processes, guided by due process principles allows for such participation and the U.S. Government does in fact, participate in key ATIS standards activities.<sup>15</sup> As an important stakeholder, the voice of the U.S. Government should be heard along with all other stakeholders. The U.S. Government's participation in standards can also help ensure that the deliverables are based on the best technical and operational inputs possible, including inputs from relevant U.S. Government interests. This will ensure that the U.S. Government's interests as a user of technology and a promoter of innovation and competitiveness are embraced.

<sup>&</sup>lt;sup>14</sup> See Supplemental Information for the Interagency Report on Strategic U.S. Government Engagement in International Standardization to Achieve U.S. Objectives for Cybersecurity, NIST IR 8074 Vols. 1 and 2, available at <u>https://nvlpubs.nist.gov/nistpubs/ir/2015/NIST.IR.8074v1.pdf</u> and <u>https://nvlpubs.nist.gov/nistpubs/ir/2015/NIST.IR.8074v2.pdf</u>

<sup>&</sup>lt;sup>15</sup> The following US Government agencies participate in ATIS: Cybersecurity and Infrastructure Security Agency; Defense Information Systems Agency; Department of Defense; Federal Communications Commission; Department of Justice/Operational Technology Division; National Security Agency; National Inst of Standards and Technology, National Telecommunication and Information Administration and the U.S. Department of Transportation.

Importantly, direct participation by the U.S. Government in voluntary standards development would support, rather than disrupt, the private sector-led approach. Such participation is in contrast to one based upon government-driven policy preferences that seek to advance geopolitical advantages at the expense of optimal technical and commercial market-based worldwide solutions.<sup>16</sup> When governments seek to lead or direct to advance parochial and local interests – rather than support private sector-led open, balanced, consensus voluntary standards, which accommodate all stakeholder interests – effective global standards development is diminished. Such government-driven policy preferences increase fragmentation because they lead to the development of duplicative standards, some of which are technically inferior. Instead of technical merit, the resulting standards reflect political choices that increase trade barriers and diminish the opportunity for firms, including those based in the U.S., to compete effectively in global markets.

Support for private sector-led voluntary consensus standards in lieu of governmentdefined and imposed standards has long been the policy of the U.S. Government. In 1995, Congress enacted the National Technology Transfer and Advancement Act, which recognized the importance to the U.S. national economy of technical standards developed by voluntary consensus standards bodies by requiring their use by federal agencies to the extent practicable and by encouraging federal agency representatives to participate in such standards development work.<sup>17</sup> OMB Circular A-119 was revised in 1998 to reflect those statutory changes.<sup>18</sup> This concept was further reinforced by revisions made to Circular A-119 in 2016, which strengthened "the role of agency Standards Executives to encourage better internal coordination and training

<sup>&</sup>lt;sup>16</sup> See Standards Strategy at 3

<sup>&</sup>lt;sup>17</sup> 15 U.S.C. § 272, note.

<sup>&</sup>lt;sup>18</sup> See, e.g., OMB Circular No. A-119 (February 10, 1998).

on standards" and provided "additional guidance for agency participation in standards development activities, including with respect to serving on standards technical committees as well as the boards of standards developing bodies."<sup>19</sup>

The Standards Strategy is in accord, calling for a renewed commitment to private, voluntary standards development to "underpin[] economic prosperity across the country and fortif[y] U.S. leadership in the industries of the future."<sup>20</sup> As the Standards Strategy states, "[s]trengthening the U.S. approach to standards development will lead to standards that are technologically sound, earn people's trust, reflect our values, and help U.S. industry compete on a level playing field."<sup>21</sup>

### **Risks of Decreased U.S. Participation**

Weakening the current private sector-led voluntary approach to standards development will pose a significant risk of decreased U.S. participation, with concomitant costs to U.S. innovation and competitiveness. Global standardization supports broad and consistent implementation of technical solutions, which expands opportunities for firms wherever located to have their technologies used and products available. This in turn supports necessary incentives to invest in CET, contribute it to standards, and implement such technologies in products that will interoperate throughout the world. Reducing global interoperability will create technical fragmentation and diminish the very efficiencies that are at the heart of standardization. Innovators and implementers alike will suffer as a result and they will be far less willing to incur

<sup>19</sup> 2016 Revisions to OMB Circular No. A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities" (January 27, 2016) at 4, *available at* <u>https://www.nist.gov/standardsgov/what-we-do/federal-policy-standards/key-federal-directives</u>

<sup>&</sup>lt;sup>20</sup> Standards Strategy at 3.

<sup>&</sup>lt;sup>21</sup> Id.

the not insubstantial costs required for standards participation, an effect that would be felt most directly by SMEs.

#### **Challenges Faced by The Private Sector**

Participating in standards development bestows tangible rewards to the private sector – innovators can expect broad acceptance of their CET-based technologies, and incumbent and new entrant firms can create new interoperable products and services by accessing such technologies and making their products and services widely available to consumers throughout the world. But there are costs to participate in standards development, which may be borne disproportionately by industry. The cost of supporting a single engineer employed to engage in standards work, for example, is estimated to be at least \$300,000 annually.<sup>22</sup>

The U.S. Government is equipped to ease these burdens and thereby support greater private sector participation in private sector-led standards development.

**Tax Credits**. One way to support greater private sector participation in standards is to establish tax credits for industry participation in voluntary, consensus-based standards development initiatives. Properly structured tax credits or incentives may allow private sector entities, notably SMEs, to increase their investments in new technologies to contribute to standards and in developing new products and services based on standardized technologies. Similarly, restoration of immediate expensing of research and development costs would incent greater private sector investment. It would be helpful to expand the definition of the current U.S. R&D tax credit for "qualified research expenses." This credit is focused on direct R&D

<sup>&</sup>lt;sup>22</sup> Jeanne Whalen, "Government should take a bigger role in promoting U.S. technology or risk losing ground to China, commission says," Washington Post, December 1, 2020 ("It costs about \$300,000 a year for one engineer to work on standards proposals and attend meetings all over the world. . . . "), *available at* <u>https://www.washingtonpost.com/technology/2020/12/01/us-policy-china-technology/</u>

expenditures (e.g., engineers). ATIS recommends that this term be expanded to support standards participation by applying the credit to items standards-related work.

Expanded R&D tax credits and improved tax treatment for expenses associated with participating in standards processes could be especially important to encourage investment in CET technologies, and more effective than grants. Tax credits could have a direct and strategic impact on a company's decision to expend resources on standards development and participation. Tax credits could also incent quality participation in standards development because only firms with strong business interests in standards would likely take advantage of them. Tax credits provide a predictable funding mechanism that may be particularly appealing to companies looking to establish ongoing, long-term investments in standards development and active engagement in the standards development process.

**Targeted Research Funding**. Increased direct governmental funding for prestandardization and transitional research is critically important, particularly because the U.S. is lagging behind other regions in prioritizing such funding. While the U.S. has repeatedly recognized the importance of R&D funding that supports commercialization of CET, most recently in the CHIPS & Science Act, actual follow-through in providing such funding continues to fall critically short. Additionally, the increasingly competitive international race for leadership in these areas requires that the U.S. rethink traditional approaches to R&D investments. In particular, it is important to prioritize funding to industry as a partner with academia in research and ensure that there are appropriate financial incentives for industry to commit resources to CET research efforts. Research funding could be tied to requirements that research outputs be suitable for standardization. Such efforts could focus on fields such as quantum computing,

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artificial intelligence, and 5G/6G wireless networks, areas where strategic competitor nations are already focused, and in some cases, leading the way.

**Recognize Standards Leadership**. The U.S. Government can also take actions to celebrate U.S. standards leadership in a more visible way to fuel continued industry investment in leadership roles. For example, industry and the U.S. Government can work together to celebrate "national heroes," the technical experts who dedicate significant effort in promoting CET innovation and R&D – similar to the recognition provided by the National Inventors Hall of Fame<sup>23</sup> and the Malcolm Baldrige National Quality Awards.<sup>24</sup>

Skilled STEM Workforce. U.S. Government policy should support a "brain gain," and not a "brain drain." To allow U.S. multinationals the ability to benefit from the work of the best technologists regardless of nationality, redirected U.S. Government immigration policies could re-invigorate the admissions process for top foreign students to do graduate studies in the U.S. and simplify the process for graduates to stay in the U.S. and work for U.S. companies after they complete their studies. Companies and university programs could then train emerging and promising R&D leaders in the kinds of skills necessary to succeed in standards and promote the development of a skilled STEM workforce to drive continued leadership in innovation and ultimately standards. Such policies could supplement existing technical expertise in the U.S. workforce and expand U.S. firms' ability to advance U.S. innovation.

### **B.** Standards Strategy Objective 1: Investment

4. How can the U.S. Government establish policies that promote standards development for CET as a critical component of U.S. innovation culture?

5. How can the U.S. Government utilize Federal spending on research and development to drive technical contributions for CET standards development activities?

<sup>&</sup>lt;sup>23</sup> See <u>https://www.invent.org/</u>

<sup>&</sup>lt;sup>24</sup> See https://baldrigefoundation.org/?gclid=EAIaIQobChMI9cGUsr2vggMVwUdyCh30kQB-EAAYASAAEgJcb\_D\_BwE

7. How can the U.S. Government better support publicly funded and private research in standards development activities for CET?

To promote effective standards, the U.S. Government should lead by example. It should actively promote, as it has consistently for years and as reflected in the Standards Strategy, that the best standards are those that are market-driven and developed under principles of openness, balance, consensus, and due process. This position underlies the U.S. approach to voluntary standards development and has long been reflected in U.S. Government policy.<sup>25</sup> As already discussed, the U.S. Government should be a vocal advocate for this approach to standards development worldwide.

U.S. Government support for greater governmental investment in and focus on foundational and emerging technologies is also an important step that could be taken to encourage greater participation in voluntary standards development. As discussed in more detail in Part IIA, such support could be in the form of favorable tax incentives and targeted government research grants.

# C. Standards Strategy Objective 2: Participation

8. How can the U.S. Government increase the amount and consistency of private sector (i.e., industry, including start-ups and small- and medium-sized enterprises (SMEs), academic community, and civil society organizations) engagement in standards development activities for CET?

Although success in standards development is not purely a function of the number of participants, effective and strategic participation and leadership by a broad cross-section of participants influence and improve outcomes. As discussed in more detail in Part IIA above, however, participation in standards development activities involves significant costs in terms of

<sup>&</sup>lt;sup>25</sup> See supra Part IIA.

time, dollars, and personnel. SMEs may find this prohibitive, but the steps already discussed involving tax incentives and grants could ease these burdens.

Support of greater participation in global partnership projects such as 3GPP, for which ATIS is an Organizational Partner, will also strengthen U.S. standardization leadership. U.S. Government officials participating in such standards activities can strengthen U.S. participation directly by supporting representatives of U.S. companies seeking leadership roles, and by maintaining and exercising their voting privileges in such standards bodies. Greater participation in these global organizations will expose firms to broader technical dialogue and the opportunity to provide input into emerging standards.

#### **D.** Standards Strategy Objective 4: Integrity and Inclusivity

21. How can the U.S. Government work with international partners to ensure that standards for CET are developed in a way that supports U.S. interests, including a commitment to free and fair market competition in which the best technologies come to market?

22. How can the U.S. Government make the United States a more desirable location to hold international standards meetings, events, and activities for CET?

One area where the government could have the most tangible impact on U.S. participation and leadership in standards for critical and emerging technologies is by improving our current low regard in international standards bodies as a venue for holding standards meetings. While political considerations certainly come into play as other regions of the world seek to minimize the number of meetings held in the U.S., there are significant practical challenges that make it more difficult to host meetings here than in many other countries. Principal among these are the difficulties in obtaining entry visas to attend meetings in the U.S. and the cost and financial challenge of hosting meetings here.

Hosting meetings in the U.S. delivers an important and visible message in support of our commitment and leadership to standards for critical technologies. It also serves as an opportunity

for new participants and businesses in the U.S. to attend face-to-face meetings without the cost and resource demands of international travel. But other countries and regions, particularly China and Europe, are also eager to host meetings for their own benefit and have proven willing to take advantage of the more challenging U.S. environment to host a disproportionate share of standards meetings, particularly with respect to 3GPP. In 2024, for example, Europe is scheduled to host eight of 22 confirmed 3GPP meetings, China will host six, and only three will be hosted in North America. That imbalance could continue for 3GPP meetings in 2025, while efforts are being made by North America to restore regional balance.

Concerns about conditions in China in particular, including security issues, a burdensome and inefficient visa process, and restricted access to company and internet services, may lead U.S. firms to reduce their participation in global standards meetings hosted in China, making it more difficult for U.S.-based companies to maintain their leadership role in the development of global technical specifications for CET standards. The U.S. Government can help counterbalance this effect by taking steps to facilitate the hosting of global standards bodies meetings in the United States, most importantly by improving the visa process for foreign participants in bona-fide standards activities in the U.S. along with support to lower the costs of hosting such meetings.

ATIS has faced significant challenges hosting global standardization meetings in the U.S. in recent years because of current visa processes or restrictions that make it very difficult for foreign participants to attend in a timely manner, or at all. Despite excellent facilities, the U.S. is seen as an impractical location for global standards meetings due to the lengthy and uncertain visa process. In advance of 3GPP working group meetings, which ATIS hosted in Chicago on November 13-17, 2023, for example, ATIS had to make special arrangements with the U.S. embassies in New Delhi and in Beijing to process those requests because the wait times for visa

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interviews in those locations are currently backlogged by months or even years. Even with such efforts, ATIS has concerns about the rejection rate for visa applicants seeking to attend 3GPP meetings in the U.S., including for applicants who have had no issues with visas for participating in similar meetings at destinations in both Europe and India.

For the Chicago 3GPP meeting, ATIS sent over 750 visa invitation letters for foreign delegates, at a cost in excess of \$10,000. This cost is exacerbated by requests for original visa invitation letters. In the case of this meeting -- the first meeting to be hosted in the U.S. since pre-Covid -- three highly regarded 3GPP subject matter experts with leadership positions were not approved for visas and thus could not attend the meeting or lead their respective working groups. This is despite the fact that these leaders have traveled to all other parts of the world to lead 3GPP meetings. It is just one example of how the U.S. visa process impacts the ability of the U.S. to host important international meetings.

The current policy and standard operating procedure regarding the retention of passports during the visa application process has also created challenges. Delegates to standards meetings travel frequently and, therefore, rely on uninterrupted access to their passports. Being without a passport for an unknown period is a significant risk to their ability to perform their job. This discourages attendance at U.S. meetings by these delegates. It also unintentionally discourages delegates from applying early, as the delegates wait to surrender their passports to avoid impacting other travel. This, in turn, may reduce the chance of receiving visas in time for the meeting. This challenge is more significant for applicants, such as those from Chinese technology companies, who are subject to "administrative checking" or other procedures that can take several months. While it has been explained that passports will be returned on request while visas are being processed, this is not clearly stated in any guidance to applicants. In practice,

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applicants are unwilling to rely on the return of their passport because they are uncertain about the process and whether it may be determinantal to their application.

To address these challenges, ATIS recommends that the U.S. Government shorten the time needed for processing visa applications, particularly for those with "administrative checking." Immediate U.S. Government action to fully staff visa processing functions and to implement the process improvements recommended above will greatly facilitate the hosting of global standards meetings in the U.S., thereby promoting U.S. leadership in global standards development. It is also recommended that the policy is clearly stated to all visa applicants that:

- 1) They can retain their passports for use while visas are processed.
- 2) If they leave their passport with the embassy at the time of application, it can be rapidly returned to them at any time, if requested.
- 3) The decision on whether the passport is retained by the embassy or the applicant does not influence the outcome of visa applications.
- 4) An electronic version of the invitation letter is acceptable (i.e., an original hard copy of the letter is not necessary).

A streamlined visa process with a clear explanation of the passport retention practice for participants in standards and specification-setting meetings would facilitate travel to important standards meetings held in the United States. This would be beneficial and advance making the United States a desirable host for these important meetings. This could include, for example, having the U.S. Government maintain a current list of attendees who are known to be global standards experts who would be eligible for a streamlined process to obtain entry into the U.S. for the purposes of attending standards meetings. Clarifying that an "original" invitation letter is not necessary could also expedite the visa process as well as lower the cost to a U.S. meeting host. The world moves correspondence electronically, but the current U.S. requirement is for an original invitation letter, both slowing the process and increasing its costs. Another challenge weighing against hosting major standards meetings in the U.S. is perceptions by standards participants from other regions concerning the treatment of individuals and seizure and search of electronic devices at the U.S. border. Recognizing that border security is vital for U.S. national security, it is important to address this perception that standards participants attending meetings in the U.S. are more likely to experience problems at the border than when attending meetings in like-minded regions such as Europe. Such perceptions are regularly raised by representatives of competing regions when future meetings in the U.S. are proposed by SDOs such as ATIS. Standards participants understand that they are subject to checks at all international borders and that entry may be delayed or denied in any country. Even so, it is important to keep in mind that if standards participants, or their employers, feel that border checks in one country are comparatively burdensome, it creates both practical and political challenges to hosting standards meetings. ATIS would welcome a dialogue between the U.S. Government and industry to address this concern.

Care must also be taken to ensure that U.S. trade policy and export controls do not have the unintended consequence of chilling U.S. industry participation and leadership in global standards development by creating uncertainty for U.S.-based standards developers and their members over whether participation in typical standards development activities and hosting such activities in the U.S. might expose them to a risk of unintentionally violating U.S. export controls. For example, when the Department of Commerce, Bureau of Industry and Security (BIS) added Huawei and certain of its affiliates to the Export Administration Regulation (EAR)'s "Entity List" in 2019,<sup>26</sup> U.S.-based standards organizations and their members faced significant uncertainty over whether participation in standards development activities – including as part of

<sup>&</sup>lt;sup>26</sup> See Addition of Entities to the Entity List, Department of Commerce Bureau of Industry and Security, 84 Fed. Reg. 22961 (May 21, 2019).

international partnership projects such as 3GPP – exposed them to a risk of unintentionally violating the EAR where Huawei or one of its listed affiliates also participated in those activities. The Final Rule issued by BIS last year resolved this uncertainty,<sup>27</sup> but until that clarification was provided, BIS's action had the unintended consequence of frustrating BIS's stated goal of promoting U.S. technological leadership by allowing U.S. companies to participate freely in global standards development efforts.<sup>28</sup>

Similar care should be taken with respect to future U.S. Government trade policies, export control regulations, and visa and immigration policies to ensure that they do not unintentionally impede U.S. industry participation and leadership in global standards development, including in the specific technology areas identified in the Standards Strategy.

The U.S. Government should also continue to partner with like-minded governments and lead in the promotion of the importance of the private sector-driven approach to global voluntary standards development by underscoring the role this model has played in driving innovation that has enabled billions of people throughout the world, in advanced and developing countries, to interconnect. ATIS recommends that the U.S. Government inform the U.S. industry – at the earliest opportunity of such partnership discussions – such as those that led to the U.S.-E.U. Trade and Technology Council (TTC).<sup>29</sup> Industry is eager to participate in and contribute to such partnership initiatives and has valuable expertise, information, and insight on global standardization activities, but clear and timely communication of U.S. Government expectations is critical to effective participation by and contributions from U.S. industry.

<sup>&</sup>lt;sup>27</sup> See Authorization of Certain "Items" to Entities on the Entity List in the Context of Specific Standards Activities, 87 Fed. Reg. 55241 (Sept. 9, 2022).

<sup>&</sup>lt;sup>28</sup> Id.

<sup>&</sup>lt;sup>29</sup> See <u>https://ustr.gov/useuttc</u>

#### E. Standards Strategy Objective 5: Ensure Openness and Interoperability

23. How can the U.S. Government establish policies that promote standards development for Open Interoperable interfaces for key CET initiatives within standards?

24. How can the U.S. Government establish policies that promote standards development for Testing and Validation methodologies, metrics, and benchmarks for key CET initiatives within standards?

Interoperability is critical to the ability of new and competing providers to bring their products to market. Vendor interoperability is best demonstrated through the cooperation of vendors in a commercial grade deployment and with the support of operators' laboratories. ATIS agrees with the U.S. Government concerning the importance of robust testing and validation methodologies and notes that the ICT industry has developed effective systems for promoting and ensuring interoperability where appropriate. The U.S. Government should take steps to incentivize U.S. company participation in standards, including testing and validation standards. The U.S. Government should promote openness and interoperability by encouraging the development of voluntary standards and profiles to enable testing and validation of interoperability. It should be noted that ATIS has a strong history of ensuring interoperability between operators.

# III. <u>CONCLUSION</u>

The National Standards Strategy for Critical and Emerging Technology is an important step forward by the U.S. Government, recognizing the critical role of standardization in driving U.S. technology leadership and innovation. ATIS commends the creation of this strategy and appreciates the opportunity to provide these comments regarding its implementation in response to the Request for Information. If there are any questions about this matter, please do not hesitate to contact the undersigned.

Respectfully submitted,

The Sal

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