Before the
DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Washington, DC 20230

In the Matter of	)	
	)	
Study on People's Republic of China (PRC)	)	
Policies and Influence in the Development of	)	Docket No. 211026-0219
International Standards for Emerging Technologies	)	
	)	

COMMENTS OF USTELECOM—THE BROADBAND ASSOCIATION

USTelecom – The Broadband Association ("USTelecom")[1] submits these comments in response to the National Institute of Standards and Technology ("NIST") request for information in the above-captioned proceeding.[2] USTelecom recognizes the importance of U.S. leadership in international standards development in order to define in a scientifically rigorous and ethical way the emerging and future technologies that shape our society and national economy. As such, USTelecom appreciates this opportunity to recommend actions to NIST and the broader U.S. government on how to mitigate potential undue influence in standards development and bolster U.S. participation in international standards-setting bodies.

[1] USTelecom is the premier trade association representing service providers and suppliers for the telecom industry. Its diverse member base ranges from large publicly traded communications corporations to small companies and cooperatives—all providing advanced communications services to both urban and rural markets.

[2] *Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies*, Notice of Request for Information, Docket No. 211026-0219, 86 FR 60801 (rel. Nov. 4, 2021) (hereinafter "Study on PRC Standards Policies Notice").

The U.S. government should work with industry and other stakeholders, like the Alliance for Telecommunications Industry Solutions ("ATIS") and others, to discuss ways to strengthen and defend the private sector-led technical standardization model.

The most immediate and important action the U.S. government can take to improve the country's global standards leadership is to address the scope of the export controls restrictions[3] imposed since May 2019 by the Department of Commerce Bureau of Industry & Security ("BIS"). Activities related to standards development and promulgation of standards should be clearly exempt from export controls restrictions.

USTelecom's long history of collaboration with U.S. government partners informs our comments in these proceedings. For example, we worked with NIST to develop the Cybersecurity Framework, and we led the Federal Communications Commission ("FCC") Communications Security, Reliability, and Interoperability Council's ("CSRIC") landmark effort to implement the Framework in the communications sector.[4] USTelecom presently chairs the Communications Sector Coordinating Council ("CSCC") and co-chairs the ICT Supply Chain Risk Management Task Force ("SCRM Task Force"), the two principal organizations that serve as the U.S. government's industry partners for developing cybersecurity and supply chain security policies.

USTelecom founded, and presently co-leads with the Consumer Technology Association, the Council to Secure the Digital Economy ("CSDE"), a group of fifteen large international ICT companies dedicated to preserving the security of our communications infrastructure and

[3] 15 CFR § 744.16, https://www.ecfr.gov/current/title-15/subtitle-B/chapter-VII/subchapter-C/part-744/section-744.16.

[4] *See* NIST, Cybersecurity Framework, https://www.nist.gov/cyberframework (last visited Dec. 5, 2021).

connected digital ecosystem. CSDE is recognized by the U.S. government as a leading industry partnership in coordinating efforts to combat botnets, respond to cyber crises, and promote IoT security through development of best practices that influence the development of standards.

In recent years, due to heightened cybersecurity concerns, questions have been raised about how China or some other country's role in standards development may impact cybersecurity. Because standards must be made available for all participants to review, the chance of a security vulnerability being introduced intentionally, without a participant noticing, is minimal. Moreover, to the extent such concerns exist, the solution is to reduce barriers to U.S. industry participation in standards development – *e.g.,* regulatory barriers and prohibitive costs – ensuring that trustworthy companies have a seat at the table.

I. THE U.S. GOVERNMENT SHOULD PROMOTE AN INDUSTRY-LED, MARKET-DRIVEN APPROACH TO STANDARDS

USTelecom agrees strongly with NIST that international standards should respond to "market needs, as well as scientific and technological developments in various countries" and "should not distort the global market, have adverse effects on fair competition, or stifle innovation and technological development. In addition, they should not give preference to the characteristics or requirements of specific countries or regions when different needs or interests exist in other countries or regions. Whenever possible, international standards should be performance based rather than based on design or descriptive characteristics."[5]

In many ways, the United States and China have taken fundamentally different paths towards standards development. The U.S. approach is market-driven and generally ensures a level playing field where technologies can rise and fall on their own merits. Standardization is

[5] *Study on PRC Standards Policies Notice*, 86 FR at 60802 (rel. Nov. 4, 2021).

led by privately empowered standards organizations, with NIST and ANSI providing crucial roles and serving as important conveners for stakeholders.

Overwhelmingly, industry prefers and consumers benefit from this market-driven approach, whereby consensus is developed on a voluntary basis and a higher degree of transparency promotes the integrity of standards. While this approach is not perfect, governments are less able to put their thumbs on the scale at the expense of integrity.

In contrast, China's approach to standardization is shaped by party-state influence and lends itself more easily to geopolitics overtaking the scientific process. The likelihood of a state exerting undue influence is greater in government-led standards organizations, where governments get a formal vote on standards, enabling national self-interest or one country's influence over others to outweigh more principled criteria.

Another problem with government-led standards organizations is the diminished role of industry experts who can provide meaningful perspectives from the companies actually developing and deploying emerging technologies. This can result in standards that are divorced from or not optimized for the operational, economic, or security realties that industry experts are familiar with because of their direct experience.

For these reasons, the U.S. government should actively promote and continue to support the globally accepted, market-driven, voluntary approach to standards development.[6] Stakeholders from all countries should be welcome to participate in the market-driven model.

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[6] *See* National Security Telecommunications Advisory Committee ("NSTAC"), Report to the President on Communications Resiliency (2021), https://www.cisa.gov/sites/default/files/publications/NSTAC%20Report%20to%20the%20President%20on%20Communications%20Resiliency.pdf ("The Government should support industry engagement in global Standards Development Organizations… to assure industry forums remain the venue for standards development.").

NIST is the agency most suited to coordinate U.S. government efforts to support this model, due to NIST's many years of close partnership with industry and established, trusted relationships.

II. RECOMMENDATIONS TO ENSURE U.S. COMPETITIVENESS AND SUPPORT A MARKET-DRIVEN APPROACH TO STANDARDS

The U.S. government should take the following steps to ensure the United States remains a global leader in standards development and promulgation. Some of these recommendations require a whole-of-government effort. Others require actions by specific parts of government. Where possible, the Department of Commerce, and NIST specifically, should serve in a leadership role, leveraging its convener capabilities and relationships with industry to advance mutual goals.

The U.S. government should ensure export controls restrictions do not prevent U.S. companies from participating in standards development.

Currently, American companies are being excluded from key organizations where standards are being developed, due to Chinese companies on the Entity List being members of those organizations. In order to shape the development of future technologies and contribute to the integrity of standards, U.S. companies must be legally permitted to participate in the relevant organizations.

U.S. export control restrictions (Entity List designations and Export Administration Regulations) would appear to create legal consequences for would-be U.S. industry participants in standards development. The federal government should take immediate action to remedy this fear by unambiguously exempting activities related to standards development from the scope of U.S. export control restrictions.

In the absence of clear exemption language, companies cannot be expected to participate. However, standards-setting projects will proceed with or without the involvement of U.S.

participants. Preventing U.S. companies from participating simply gives China and other countries that participate more influence, at the expense of U.S. economic interests, prestige, and influence on the world stage.

The U.S. government should create financial incentives to help offset the costs of participating in standards bodies and increase U.S. participation.

To increase the United States' leadership in global standards, more private sector organizations need to become contributing standards members and the U.S. government should be adequately resourced and staffed. Financial costs are one of the major barriers to increased participation by U.S. companies in standards-setting. On an annual basis, standards development currently costs the participating companies about $300,000[7] per engineer that serves as their representative. Developing a single standard is often an intensive, multi-year effort, and therefore can cost companies millions of dollars.

There are specific actions the U.S. government should consider to offset these costs, including grants to companies that find costs prohibitive and tax incentives to encourage greater participation by U.S. tax-paying companies. For example, and most imminently, Congress should expeditiously pass the U.S. Innovation and Competition Act ("USICA"), which would provide grants to companies for standards development.[8] While this would be an excellent start, other opportunities for funding should also be explored, in order to mitigate against the uneven playing field created by the Chinese government's substantial investments in standards development and continuous support for their own companies. At the same time, as discussed, it

[7] Jeanne Whalen, *Government Should Take Bigger Role in Promoting U.S. Technology or Risk Losing Ground to China, Commission Says*, Washington Post (December 1, 2020), https://www.washingtonpost.com/technology/2020/12/01/us-policy-china-technology.

[8] S.1260, 117th Cong. (2021).

is important to maintain the industry-led, voluntary model of standards development that has been championed by the United States and its key allies.

In addition to direct funding, the government can incentive increased U.S. company participation through changes in tax policy. A particular tax issue that merits attention is how staff time related to standards development is classified. Currently, such staff time is typically classified as an operating expense under the Generally Accepted Accounting Principles ("GAAP") maintained by the Financial Accounting Standards Board ("FASB").[9] Since companies have incentives to minimize operating expenses, this creates a disincentive for spending staff time on standards. Companies should be able to classify staff time related to standards development as capital investments (*e.g.,* speculative research) instead of operating expenses. This would be good public policy and also acknowledges the on-the-ground reality that standards development has become as important as other kinds of research and development, both for shaping future technologies and staying competitive in the global marketplace.

The U.S. government should increase cooperation with like-minded countries to promote market-driven approaches to standards development.

One of the best ways to combat the specter of geopolitics in international standards bodies would be for the U.S. government to partner with like-minded countries to promote the efficient development of industry-led international standards. This includes strengthening relationships between government-led organizations and industry-led organizations to ensure, among other things, that the work of these organizations does not conflict or overlap with each other. This would help ensure appropriate expert inputs from companies that create and deploy emerging technologies.

[9] *See* FASB Accounting Standards Codification, https://asc.fasb.org (last visited Dec. 5, 2021).

The U.S. government should also consider hosting international standards meetings in the United States, in order to make it logistically easier for U.S. industry and government participants to join, as well as lower costs of participation. To enable the success of this effort, the U.S. government should examine ways of addressing visa processes (or overt restrictions) that may prevent experts from other countries from participating in scientific meetings hosted within the United States.

The U.S. government should invest in research and development, as well as education to increase the future talent pool of standards experts.

Ensuring the United States maintains and secures its place as a global leader in standards development requires a forward-looking vision that goes beyond immediate returns on investment. For instance, investing in research and development will drive and accelerate the release of future international standards. This is because standards depend upon peer reviewed and often innovative, experimental research. In recent years, China has devoted substantial resources to ensuring its own competitiveness on the world stage. The U.S. government should consider ways that it can incentivize and unleash private sector innovation, in order to ensure the country does not fall behind.

Part of ensuring U.S. long-term standards leadership is investing in the talent pool for standards development. China is actively recruiting university graduates. In comparison, U.S. universities generally place a lower priority on promoting standards. The U.S. government should look for ways to enhance the STEM talent pool and support educational programs that equip the next generation of experts to sustain the economic security of the United States.

III. CONCLUSION

USTelecom appreciates this opportunity to recommend actions to advance NIST and the broader U.S. government's goals, which USTelecom shares, to ensure the integrity of standards development and encourage U.S. participation in international standards-setting bodies.

Respectfully submitted,

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