

December 6, 2021

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RE: *Comments of ACT | The App Association to the National Institute of Standards and Technology's Public Consultation 'Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies'*

ACT | The App Association appreciates the opportunity to provide input to the National Institute of Standards and Technology (NIST) on the People's Republic of China's (PRC) policies and influence in the development of international standards for emerging technologies, per Section 9414 of the National Defense Authorization Act of 2021 (NDAA).¹

The App Association represents approximately 5,000 small- to medium-sized software application developers and connected device companies across the globe. Our members leverage the connectivity of smart devices to produce groundbreaking software solutions that impact Americans' everyday lives. App Association members are at the forefront of the mobile revolution in both rural and urban areas, and innovate for a variety of sectors including healthcare, agriculture, finance, and entertainment, providing the touchpoint for the internet of things (IoT) across consumer and enterprise use cases. App Association member companies lead the \$1.7 trillion app economy in the United States and employ tens of millions around the globe, including 5.9 million Americans. Because countless App Association member companies innovate and compete utilizing technical standards, international standards have a direct impact on our community (and U.S. leadership in the global digital economy).

While the global digital economy has enabled, and continues to hold great promise for, small businesses, App Association members face an array of challenges when entering new markets. These challenges may take the shape of laws, regulations, or policies that exclude goods and services from foreign markets and seek to artificially stimulate domestic industries. While these trade barriers use different means, they have the same end: impeding access to the global digital economy and reducing our members' ability to sustain, grow, and create new American jobs. Some standards are positioned by

¹ [86 FR 60801](#).

governments as trade barriers, negatively impacting App Association members. A successful international standards system serves as a key means to reducing those barriers.

In assessing China's policies and influence on international standards, NIST and the research organization that it will select should begin its effort with a comprehensive assessment of the existing standards landscape, recognizing that thousands of standards development organizations (SDOs) and less formal consortia, based both within the U.S. and abroad include thousands of different participants. Generally, SDOs and their participants operate using an open, transparent, and consensus-based approach to standardization effected through SDO governance policies, and this common thread across standard setting ecosystem drives best practices and interoperability at many different levels (e.g., transport, syntactic, semantic, etc.). We appreciate that NIST and its research organization, per Section 9414 of the NDAA, must settle on metrics for measuring standardization trends, which we provide input on below.

Protecting national and economic security is not mutually exclusive with the U.S. priority of promoting international standardization. Generally, the U.S. approach to standardization has been effective in supporting the development of market-driven, voluntary, and consensus-based standards. Under Section 9414 of the NDAA and more broadly, concerns continue to be raised about China's efforts within international standardization bodies, China's overall approach to standardization, and the impact on U.S. competitiveness and national security. While examining this dynamic is appropriate and we support NIST's efforts under Section 9414 of the NDAA, we strongly urge for reliance on objective metrics that are based on data and tangible outcomes. For example, relying on superficial metrics such as the number of participants or contributions alone will obscure broader context and result in insufficient measurements that ignore results. We agree that it is vital for U.S. companies, in particular small businesses that the App Association represents, to participate in standards development. Initially, NIST and its research organization can provide much-needed insights by evaluating SDO and consortia governance models, highlighting leading examples as models of success.

In response to NIST's request for input and the specific questions presented, we offer the following specific viewpoints and recommendations:

- In **assessing China's efforts and ability to advance its interests in international standards for emerging technologies**, we urge NIST and its resource organization to recognize that, despite claims by China (and others) of their leadership in international standards based on superficial metrics (e.g., the adoption of solutions into international standards, the number of contributions, the number of claimed essential patents to a standard, and others), international SDOs and consortia leverage governance processes to ensure transparency and consensus that prevent a process being dominated by any one party. Claims of manipulation of SDO processes should be examined and assessed based on data and objective outcomes, in particular whether such attempts succeeded or

not. Further, this assessment by NIST and its research organization should recognize that regular and appropriate SDO processes feature collaboration amongst participants, and that such interactions, when consistent with SDO policies that protect against improper influencing of deliberations and voting and relevant laws, are not evidence of SDO manipulation. While each SDO can be different (and that is appropriate because SDOs should be able to make governance changes to respond to their participants' needs and concerns), SDO governance processes should reflect transparency, flexibility, and unbiased welcoming of any participant. In addition, SDO governance processes are dynamic and evolve to address any weaknesses that are identified.

- In **assessing China's participation in international standards setting over the last 10 years**, we urge NIST and its research organization to recognize that the U.S. government (and U.S. industry and other stakeholders) have long prioritized engagement by, and have undertaken capacity building to support, those from both developing and developed countries participating in the international standards system. Such efforts have been supported by non-governmental organizations including trade associations like the App Association. As a result, there has been an increase in Chinese participation in international standardization, which has the effect of avoiding China-specific mandates (e.g., WAPI²) from putting barriers to trade in place undermining international standards that U.S. companies rely on to compete in markets around the globe. We again request that NIST and its research organization rely on objective outcomes, not superficial statistics such as the number of participants and/or contributions. Specifically, this assessment should consider the standard ultimately adopted, whether it reflects contributions from that SDO's participants, and who the adopted standard benefits. Furthermore, NIST and its research organization should evaluate the extent to which such standards are adopted and how relevant the standard is to an international sector/market. We caution against too heavily weighing the value of leadership positions within SDOs and SDO committees. Such roles can widely vary in their impact and role(s) from SDO to SDO, and chairs often are required by SDO governance procedures to exhibit a neutral approach and to focus on procedure.
- In **assessing the effect of China's standardization strategy and "China Standards 2035" on emerging technologies**, we urge NIST and its research organization to use an objective and data-driven approach, acknowledging that the strategy is more aspirational, intended for a domestic audience, and reflects goals that have not been realized and are unlikely to come to fruition. Generally, many countries have strategic standards plans and policies to increase participation and leadership in SDOs, the U.S. included. NIST and its research organization should consider evaluating China's progress in re-orienting its standardization approach to one that is market-driven and increasingly open to the international community, reflected in its National Standardization

² <https://www.computerworld.com/article/2565021/china-agrees-to-drop-wapi-standard.html>.

Development Program (NSDP).³ While the NSDP is far from ideal (e.g., lacks adequate checks for the Chinese domestic standardization system embodied in the American National Standards Institute [ANSI] Essential Requirements [ERs])⁴, it objectively represents progress.

- In **assessing whether international standards for select emerging technologies are being designed to promote interests of the People’s Republic of China as expressed in the “Made in China 2025” plan to the exclusion of other participants**, we strongly urge NIST and its research organization to first tackle whether there is a foundation for this question as international SDOs take measures in their policies and procedures to guard against undue influence by any stakeholder. NIST and its researchers could provide important insights by exploring various Chinese domestic SDOs that are not in alignment with these foundational principles, and which produce standards that are then memorialized in Chinese law and required for market entry (representing a significant trade barrier).
- In **assessing previous practices used by the People’s Republic of China, while participating in international standards setting organizations may foretell how the People’s Republic of China is likely to engage in international standardization activities of critical technologies like artificial intelligence and quantum information science**, NIST and its research organization should recognize that any SDO participant, Chinese or not, will influence a standardization process successfully by making contributions that meet the needs of the SDO effort and the market generally, and that international SDO policies and processes provide checks against improper influence and gaming of their systems. Further, adoption of the standard is very unlikely to occur if it does not meet market requirements. It is not unexpected or improper that Chinese companies may increase their participation in international standardization as they too seek to compete internationally.
- In **assessing how to develop recommendations on how the United States can take steps to mitigate the influence of the People’s Republic of China and bolster United States public and private sector participation in international SDOs**, we first encourage NIST and its research organization to comprehensively assess whether U.S. policy and law can support this goal, and to what extent it has already. NIST and its research organization should also address how some recent actions by the U.S. government have undermined this goal.⁵

³ www.news.cn/politics/zywj/2021-10/10/c_1127943309.htm.

⁴ <https://www.ansi.org/american-national-standards/ans-introduction/essential-requirements>.

⁵ The U.S. government’s May 2019 Entity List update and subsequent rules that created an exemption for standards from export controls in certain bodies in which Huawei participates has led to a decrease in U.S. company participation in some SDOs where Chinese companies have continued to increase participation, also undermining the U.S. priority for open, consensus-based standardization processes. See <https://www.federalregister.gov/documents/2020/06/18/2020-13093/release-of-technology-to-certain-entities-on-the-entity-list-in-the-context-of-standards>.

NIST and its research organization should also clearly articulate U.S. government standards policy goals and priorities, and explore ways the U.S. government can take steps to advance U.S. standards policy goals. In the near-term, the U.S. government can take steps to correct policies that have undermined these priorities. It is critically important that the U.S. government take steps to exempt standards development and promulgation activities from the export administration regulations (EAR)⁶ when those activities take place in organizations with open participation. More broadly, NIST and its research organization should examine opportunities for improving U.S. participation in international standardization through measures such as (but not limited to) increased U.S. government funding of research relevant to international standards; prioritizing removal of barriers to travel and participation in international standardization for U.S. companies (in particular small businesses); and sustained logistical and financial support for U.S. companies to otherwise participate in international standardization.

- In **examining how to promote the adoption of international standards**, NIST and its research organization must recognize that voluntary, consensus-based, open-participation technology standards are vital for U.S. competitiveness and national security. It is crucial that the U.S. maintain, and improve, its support for the open, consensus-based, and private sector-led standardization approach as a critical prong in its effort to address U.S. and Chinese competitiveness. Specifically, it would undermine these goals, and therefore U.S. competitiveness and national security, to advocate for the exclusion of any particular country from international standardization, and the U.S. government should recognize that the private sector-led standardization approach employs governance processes that will address any attempts at dominance. The U.S. government can also promote the adoption of international standards by supporting U.S. participation (and leadership) in international SDOs.

⁶ See <https://www.federalregister.gov/documents/2020/06/18/2020-13093/release-of-technology-to-certain-entities-on-the-entity-list-in-the-context-of-standards>.

The App Association appreciates the opportunity to provide its views to NIST and urges for careful consideration of our interests.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brian Scarpelli', with a stylized, cursive script.

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