6 December 2021

National Institute of Standards and Technology (NIST)

100 Bureau Drive

Gaithersburg, MD, 20899

Re: NIST-2021-0006, Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies

Dear NIST,

The IEEE Standards Association (IEEE SA) thanks NIST for the opportunity to provide comments to the Request for Information on the Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies.

We appreciate NIST’s efforts to solicit public comment on PRC’s policies and influence in the development of international standards for emerging technologies as it prepares information for a study, as outlined in Section 9414 of the National Defense Authorization Act (NDAA) of 2021, on the effect of policies of the PRC and coordination among industrial entities within the PRC on international standards bodies engaged in development and setting international standards for emerging technologies, as well as to help inform actions the U.S. could take to mitigate any undue influence and bolster U.S. public and private sector participation in international standards-setting bodies.

As the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity, and a globally recognized standards developing organization (SDO) grounded in an open, inclusive, transparent, and consensus-building process, we appreciate NIST’s RFI process to gain information and are pleased to provide the following response.

Sincerely,

IEEE Standards Association

**IEEE SA Comments**

As stated in the RFI’s Supplementary Information, industries use standardized processes and specifications to ensure that products are built to work together seamlessly and standards allow products to be designed and produced at scale and used worldwide, which facilitates global trade. As a global standards developing organization, we recognize the role of standards as strategic tools for raising safety and environmental performance as well as ensuring interoperability. They drive innovation, competitiveness, sustainability, and consumer protection, while helping to grow markets, facilitate technology diffusion, and promote production efficiency as well as product and systems interoperability. These attributes are essential to help ensure that markets remain open, allowing consumers to have choice and allowing new entrants to successfully enter markets, in addition to being instrumental to addressing local and global challenges we face today. [[1]](#footnote-1)

We posit that technical standards are developed by several types of standards developing bodies from around the globe and that many of those bodies operate under governance rules that reflect the principles of private-sector-led, voluntary, open-participation and consensus-based standards. The U.S. has consistently, and in our opinion appropriately, promoted those principles as the basis for successful international standardization over many decades, and they have greatly contributed to advancing U.S. innovations and technological competitiveness. This global model has become a vital component of the international standardization ecosystem, and one that is embraced by the U.S. and other countries and organizations around the world as it provides equal access to standards setting, regardless of nationality or geopolitical constraints, thus contributing to a broadly representative standardization environment. This moves standardization toward open, global horizons and the creation of an environment in which companies can succeed world-wide.

There has been increased discussion about a perceived rising influence of China in international standards setting, particularly in emerging technology areas, but much of this is misleading. Overall, rules and processes that ensure a level playing field are widely adopted in international standards development. Governance systems are transparent, flexible, and responsive to identified issues to maintain fair standards development. In short, timely, robust and market relevant standards are developed in standards bodies that follow rigor in operating procedures and policies that support private sector-led, voluntary, open-participation and consensus-based principles and are designed to best meet the needs of their stakeholders and the industries they represent. Further, the innovation by standards bodies in how they operate has contributed to the success of the U.S. approach and the global standardization system in general.

Chinese participation in international standards setting has brought benefits to U.S. industry and international SDOs. China’s input has led to more comprehensive international standards and increased the number of international standards adopted in China, reducing barriers to U.S. and other countries’ companies that operate there. Seeking to address concerns related to perceived dominance by China through government intervention in the private sector-led standards process would be counter-productive and could rather negatively impact U.S. competitiveness. Instead, such concerns may be mitigated through proper due-process vigilance within international SDOs, and through government policies and initiatives that foster and encourage private sector leadership in international standardization.

Particularly, openness in participation is critical to standardization, as it enables the creation of globally interoperable ecosystems, facilitating trade, and global market access for U.S. industry. The U.S. should continue to promote and role model openness of participation in international standards and should attempt to include as many standards-involved organizations from as many countries as possible. We suggest that U.S. Export Administration Regulations should be revised to exempt standards development activities from Entity List restrictions when those activities take place in organizations with open participation models.

As NIST prepares for the study on the effect of policies of the PRC and coordination among industrial entities within the PRC on international standards bodies engaged in development and setting international standards for emerging technologies, and to help inform actions the U.S. could take to mitigate any undue influence and bolster U.S. public and private sector participation in international standards-setting bodies, we suggest that the study include ascertaining the level of understanding among stakeholders of the international and domestic standards systems. We suggest that it also garner insights into the differences among international approaches to standardization that are integral to respective countries’ standardization strategies.

As NIST seeks comments to provide information for the study and resulting recommendations, we note that governments and SDOs need to work collaboratively as the overall standardization ecosystem evolves and new factors are introduced into international standards development. Today, many standard bodies are high stakes forums for techno-political decision-making, extending beyond technical optimization. Commercial stakes, as well as those related to environmental, safety, and health and well-being consideration, are bringing to the forefront a new era of standardization, which needs to be both global and inclusive. The standardization processes of SDOs must have sufficient clear rules, and they must be sufficiently nimble to effectively address the development and commercial application of fast-moving technologies. For SDOs, it is important that they uphold rules supporting openness in participation and consensus-based standards. For governments, it is important that they recognize the respective policies and procedures of SDOs and the proven rigor behind them, acknowledge the communities and stakeholders SDOs serve, support stakeholders to bolster industry-led participation in international standards setting, and together with SDOs, encourage increased informed education regarding standards development paradigms and processes.

We also suggest that programs to help policy makers understand and use standards to support public policy initiatives would be beneficial, inclusive of such insights into referencing standards in legislation or regulation, as well as leveraging standards to support public decisions or actions. Engagement in standards fora would allow policy makers to stay informed of developments in global standardization that they may find useful to support or inform policy goals.

There are many aspects to be explored to understand how current standards and technical requirements are today interacting with public and government entities, policy frameworks, and public policy making processes. This includes increased understanding of the relationships during standards and standards systems’ development as well as standards implementation and oversight, and in measuring their respective impacts. A framework that builds upon both existing public- and private-led processes and new or emerging initiatives to the benefit of all has the potential to significantly advance governance models that can effectively address the complexity of today’s interlinked issues.

As NIST progresses its work to ensure that the broad perspective of the standards community informs the development of and aligns with government's approaches, IEEE SA stands ready to coordinate with NIST.

1. http://globalpolicy.ieee.org/wp-content/uploads/2020/08/IEEE20013.pdf [↑](#footnote-ref-1)