UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899-
OFFICE OF THE DIRECTOR

May 10, 2024

The Honorable Frank Lucas
Chairman
Committee on Science, Space, and Technology
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas:

Thank you for your November 3, 2023, letter requesting comments from the National Institute of Standards and Technology (NIST) on the recommendations found in the Congressionally mandated report, entitled *A New Great Game?: China's Role in International Standards for Emerging Technologies*[1] and questions regarding the national security risks posed by the People's Republic of China's (PRC's) significant involvement in the international standards system.

In accordance with section 9414 of Public Law 116-283, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, NIST contracted with Makwa Global to conduct a study and make recommendations, which subcontracted the work to Exovera's Center for Intelligence Research and Analysis. The report states findings and makes recommendations on the effect of the policies of the People's Republic of China and coordination among industrial entities within the People's Republic of China on international bodies engaged in developing and setting international standards for emerging technologies. The report was not edited or reviewed by NIST and, therefore, does not reflect NIST policy or perspectives.

The U.S. Government National Standards Strategy for Critical and Emerging Technologies (USG NSSCET) released in May 2023 is a major component of a multipronged effort that recognizes and addresses the standards-related risks to American competitiveness, security, and economic prosperity. This whole-of-government strategy identifies actionable objectives and lines of effort to significantly strengthen U.S. leadership in international standardization with a focus on critical and emerging technologies (CETs) such as artificial intelligence,

[1] A New "Great Game?": China's Role in International Standards for Emerging Technologies (August 31, 2022), https://cira.exovera.com/research-analysis/china/nist-report-a-new-great-game-chinas-role-in-international-standards-for-emerging-technologies/.

biotechnologies, quantum information technologies, and communications and networking technologies. The strategy articulates the role of U.S. government in bolstering support for a private sector-led, open, consensus-based standards system, which has resulted in international standards that are technically sound, favorable to our stakeholders, and help to ensure access to global markets, which has significantly benefited our society.

NIST is the agency best positioned to facilitate strong interagency coordination, while ensuring the Departments and Agencies participate in the private sector-led system. The NIST Director and Under Secretary of Commerce for Standards and Technology, as directed by the Secretary of Commerce, serves as the President's principal adviser on standards policy pertaining to the Nation's technological competitiveness and innovation ability (15 U.S.C. §272 (b)). NIST also oversees and executes responsibilities of the National Technology Transfer and Advancement Act (NTTAA),[2] leads the Interagency Committee on Standards Policy, oversees implementation of the Office of Management and Budget Circular A119: *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, and recommends the U.S. government utilizes voluntary consensus standards.

In accordance with these roles, NIST agreed to serve as the U.S. government lead for the development and execution of a government-wide implementation plan for USG NSSCET that will be built on transparency, private sector leadership, and stakeholder engagement. To advance the development of the implementation plan, NIST, along with the American National Standards Institute (ANSI) and other U.S. government stakeholders, hosted a series of 10 listening sessions and business roundtables with various communities of interest, and solicited stakeholder input through a Request for Information which closed on December 22, 2023. Additionally, I charged the NIST Visiting Committee on Advanced Technology to establish a Subcommittee on International Standards Development to identify barriers to participation in international standards development, and to provide recommendations to remove said barriers.

NIST is currently reviewing the extensive stakeholder feedback and will propose recommendations for process and policy changes that the U.S. government can make to strengthen U.S. engagement in international standards development, especially in areas of critical and emerging technology(ies) (CET). Concurrently, NIST is working across the federal government and with industry to find new ways to strengthen, coordinate, and ensure strong and effective U.S. representation in bilateral, regional, and international standards development fora. NIST is also working with federal and private sector partners to promote consistent interpretation and application of internationally recognized and accepted principles of standardization. In addition, NIST is working closely with non-governmental stakeholders, including, national and international standards developing organizations (SDOs), industry, academia, and the Interagency Committee on Standards Policy to lay the groundwork for coordinated implementation of the recommendations, as well as raise awareness among federal executives about opportunities, challenges, and issues within standards developing bodies.

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[2] https://www.govinfo.gov/content/pkg/PLAW-104publ113/pdf/PLAW-104publ113.pdf

Our approach recognizes that the U.S. standards system is unique compared to other countries as it is built upon a voluntary, decentralized, and private sector-led open standards development processes. The U.S. system mandates that stakeholders discuss technical standards in an open forum, build consensus, and submit the standard for final adoption by the standards body, and not the government. The U.S. government is a participant in that system, primarily focused on standards development activities that impact national and economic security, and collaboration with international partners.

Specifically, the U.S. government works with ANSI, a private, nonprofit organization that administers and coordinates the U.S. standardization system. ANSI is the sole U.S. representative to the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). ANSI publishes the U.S. Standards Strategy (USSS), which is updated every five years to assure that it continues to meet the needs of diverse U.S. interests and that it reflects technological advancements, industry growth areas, national and international priorities, and updates to relevant U.S. government policy. The USG NSSCET is intended to support and complement ANSI's USSS and reinforce the role of the U.S. government as a stakeholder in the standards system with a focus on enhancing engagement in international standards for CET.

Additionally, since the referenced report was issued, NIST has reviewed the recommendations in the report and has implemented, or made significant progress on, the following actions:

- Over 440 NIST staff participate in over 3,618 committees, subcommittees, and working groups in over 300 SDOs, both domestically and internationally. Over 125 NIST staff serve on almost 150 International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) Technical Committees and Joint ISO/IEC Technical Committees. NIST leads the U.S. Technical Advisory Groups (TAG) for Biotechnology, Units and Measures, and Reference Materials. Additionally, NIST was recently asked to lead the U.S. TAG for Quantum Technologies. The U.S. input to ISO and IEC is developed through these U.S. TAGs. Many NIST staff hold international leadership roles in technical standardization activities in bodies.
- By participating in these standards activities, NIST experts bring world-class technical expertise, and enhance the timeliness and technical robustness of the resulting standards. Foundational to successful implementation is engaging NIST expertise and research programs across CET areas including quantum, biotechnology, communications, cybersecurity, and artificial intelligence. NIST research and development programs provide significant and unique contributions essential to understanding technology applications and performance to advance the development of CET and enhance the competitiveness of U.S. industry.
- Our work on international standards activities, in partnership with industry and other federal agencies, has led to solutions brought forward by the U.S. being adopted into these standards. This is especially the case in those SDOs. With active U.S. participation, standards development is conducted with due process and organizational procedures that

provide for strong checks and balances. While China has significantly increased its participation in a number of SDOs, their ability to influence the outcomes of standards development has varied widely across these organizations.

- NIST, along with other bureaus in the U.S. Departments of Commerce and State, leverage existing dialogues, fora, and mechanisms to effectively engage U.S. allies and other economic partners in standards-setting efforts. These include active engagement with the U.S.-EU Cyber Dialogue and U.S.-UK Comprehensive Dialogue on Technology and Data. Additional fora include the U.S.-EU Trade and Technology Council (TTC), Quadrilateral Security Dialogue (QUAD), G7, Five Eyes, and Indo-Pacific Economic Framework for Prosperity (IPEF). These international standards fora provide a shared understanding of the challenges faced in standards development, identify opportunities to remove barriers, and significantly strengthen participation and leadership by the U.S. and likeminded partners and allies.
- NIST is working closely with agencies across the federal government and other likeminded partners and allies to share information on standards participation. NIST actively shares significant strategic standards information with federal agency partners via regular email communications (e.g., International Standardization Alerts, and China Standardization News and Alerts). NIST, the International Trade Administration (ITA), and State further shares relevant open-source strategic standards information with likeminded allies through mechanisms established as part of multilateral or bilateral partnership agreements (e.g., QUAD, TTC, U.S.-Canada).
- NIST works closely with the Office of the U.S. Trade Representative (USTR), ITA within the U.S. Department of Commerce, and other trade agencies to promote the use and acceptance of standards from U.S. domiciled SDOs. In addition, this work includes reducing complexity and increasing efficiency associated with testing and certification of U.S. products that meet the regulatory requirements for the global market, e.g., through mutual recognition agreements.
- NIST works in partnership with USTR, ITA, and other trade agencies to operate the U.S. Enquiry Point to meet the Nation's obligations under the World Trade Organization's Technical Barriers to Trade (TBT) Agreement. Through the Enquiry Point, NIST is able to alert U.S. stakeholders to standards being considered for use in technical regulations by foreign countries. When such standards are either not consistent with the Nation's TBT obligations or when countries are looking to use standards that can block U.S. access to those markets, then U.S. stakeholders can raise their concerns through the Enquiry Point. NIST Enquiry Point staff also work with USTR to take up such issues bilaterally with the country in question, as well as in multilateral fora such as the TBT Committee.
- Consistent with the White House's National Standards Strategy for Critical and Emerging Technology, NIST seeks to ensure that U.S. companies exercise leadership in international standards setting bodies. In September 2022, BIS, in consultation with NIST and other government agencies, amended the Export Administration Regulations (15 CFR parts 730-774) to allow the release of certain low-level software and technology to entities listed on the Entity List in the context of standards-setting activities.

NIST efforts sustain support for a private sector-led U.S. standards system and advocate for federal government participation in the development and use of voluntary consensus standards. NIST works closely with our interagency partners to lead the planning for the implementation of the USG NSSCET in a way that is informed by strategic coordination with the private sector and across the federal government. The evolving implementation plan requirements are well aligned with the NIST mission and its core research programs. I look forward to further engagement with you on these important topics as our plans develop.

Please feel free to contact Kari Reidy, Acting Director, Congressional and Legislative Affairs Office at kari.reidy@nist.gov should you or your staff have any questions or would like further information about NIST.

Sincerely,

LAURIE LOCASCIO

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Laurie E. Locascio, Ph.D., NAE
Under Secretary of Commerce for Standards and Technology and
Director, National Institute of Standards and Technology

Identical letter sent to:
The Honorable Bill Posey
The Honorable Jim Baird
The Honorable Daniel Webster
The Honorable Mike Garcia
The Honorable Stephanie Bice
The Honorable Rick Crawford
The Honorable Claudia Tenney
The Honorable Scott Franklin
The Honorable Rich McCormick
The Honorable Brandon Williams
The Honorable Tom Kean
The Honorable Dale W. Strong

cc: The Honorable Zoe Lofgren
Ranking Member
Committee on Science, Space, and Technology