



POLICY

UNDER SECRETARY OF DEFENSE
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WASHINGTON, D.C. 20301-2000

APR - 3 2024

The Honorable Frank Lucas
Chairman
Committee on Science, Space & Technology
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your letter of November 3, 2023, to Secretary of Defense Lloyd J. Austin III, regarding the Congressionally mandated report titled *A New "Great Game": China's Role in International Standards for Emerging Technologies*. I am responding on behalf of Secretary Austin as this matter falls under my purview.

The Department of Defense fully recognizes the critical importance of standards development to U.S. global technology leadership, which has long been a part of our military advantage. The Department takes seriously the challenge of growing focus by the People's Republic of China (PRC) on international standardization. We work closely with our interagency, international, and private-sector partners to ensure the integrity of standardization processes. As the Department continues to invest in emerging technologies, we have sought to enhance collaboration with these partners to ensure U.S. private and public sector engagement in standardization remains robust.

Responses to the questions that you posed in your letter can be found in Enclosure 1, and a similar response is being provided to the other signatories of your letter. The Department will continue to keep Congress informed on these matters. We appreciate your continued support of the men and women of the Department.

Sincerely,

Sasha N. Baker
Acting

Enclosure:
As stated

cc:
Honorable Zoe Lofgren, Ranking Member



Enclosure 1: Responses to Questions in the Committee on Science, Space, and Technology's November 3 Letter

The Department of Defense (DoD) offers the following responses to the questions identified in your November 3 letter:

Please share DoD's opinions on each recommendation in the report and explanations for why or why not DoD is actively implementing each recommendation:

Encouraging Greater Transparency

Make additional funding available to international standards organizations contingent upon publication of author metadata and standards uptake information.

International standards organizations are private sector-led non-government organizations in which members participate at the national delegation level or individually. These organizations are funded through memberships paid by the participants and by the sale of standardization documents (i.e., standards) published by the organizations. This ensures all impacted stakeholders can engage to ensure the standards developed are widely accepted and support global markets. DoD currently has no other mechanism to provide additional funding to these organizations to incentivize publication of author metadata or standards uptake information. The United States can continue to advocate for international standards organizations to remain open, transparent, non-discriminatory, and balanced through continued participation and involvement by both U.S. industry representatives and government personnel.

Conversely, withholding funding to international standards organizations would require either withdrawing participation and/or ceasing use of the standards published by these organizations. DoD would not support either of these actions, as they would undermine U.S. technological leadership. Withdrawing participation from standardization processes could also lead to reductions in the sustainability of defense systems and increased costs as sustainment of those systems becomes more reliant on specialized, non-standard parts.

Fund education efforts for participants in international standards organizations to give them more context on their foreign counterparts and the roles and missions of their respective home organizations.

DoD supports efforts to enhance U.S. private and public sector engagement in international standards organizations, including through efforts to provide briefings for participants regarding foreign counterpart participation in those organizations. The U.S. standards system relies upon active engagement between the public and private sectors, including industry, government, standards developing organizations, academia, consumers, and others. As part of such engagement, training may be provided either by the head of the U.S. delegation for a particular body, or by the organization itself. The National Institute of Standards and Technology (NIST) and Defense Acquisition University offer standards development training to government personnel.

As the international standardization landscape evolves, DoD recognizes the need to proactively increase the availability of our training offerings and refresh the contents of our offerings. We

Clarify existing export control regulations that could accidentally discourage U.S. companies from participating in standards development.

DoD and our interagency partners weighed the national security concerns of PRC access to export-controlled information and recognized the importance of ensuring that export controls and associated compliance concerns do not impede the participation of U.S. companies in standards activities. This balance is reflected in the Department of Commerce's rule, "Authorization of Certain 'Items' to Entities on the Entity List in the Context of Specific Standards Activities."

Establish closer collaboration between the United States government and standards development organizations.

Currently, DoD leads federal agencies in using non-government standards in accordance with Public Law 104-113, the National Technology Transfer and Advancement Act, and Office of Management and Budget Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities." DoD actively participates in hundreds of technical committees, councils, consortia, and other activities to engage in standards development and to support adoption and use of these standards in design, acquisition, and sustainment to meet DoD needs. DoD engages with interagency partners, including NIST, and with the private sector by collaborating with standards development organizations to ensure we are working together to meet DoD's needs.

Provide funding to host more international standards development meetings in the United States, including major gatherings.

DoD agrees with the report's assertion that hosting international standards development meetings in the United States would likely encourage higher attendance from U.S. industry and government stakeholders. Most international standards organizations are private sector led non-government organizations in which members participate at the national delegation level or individually. These standards organizations are funded through memberships paid by the participants and by the sale of standardization documents (i.e., standards) published by the organizations.

The International Telecommunication Union (ITU), in contrast, is an intergovernmental treaty-level organization, which is supported by financial contributions from the U.S. Government and other member-states, along with voluntary contributions from private sector members who participate in ITU as sector members. Given the criticality of standards developed in the ITU across several sectors, DoD supports seeking additional opportunities to host ITU meetings in the United States.

DoD will continue to work with interagency partners to increase the attractiveness of the United States as a location for standardization meetings.

Provide consistent funding to sustain U.S. participation in international standards organizations.

DoD supports the report's focus on supporting U.S. private and public sector participation in standards development organizations. Robust U.S. participation will help ensure standardization produces impartial and effective standards. While DoD has limited authority to fund private sector participation in international standards organizations, we are coordinating with

Does DOD track the aggregate influence, performance, or participation in international standards involving countries of concern, such as China? If so, how and what are the metrics? Does DOD actively disseminate information about the importance of participating in standards bodies to individual researchers or experts from academia and industry? Does DOD provide to interested parties that fit these criteria any incentives or assistance to alleviate the human capital and financial burden of international standards participation?

The NSSCET strengthens DoD's approach to collaboration across the federal government to accelerate standardization efforts led by the private sector. These private sector-led efforts help to facilitate global markets, contribute to interoperability, and promote U.S. competitiveness and innovation. DoD partners with the interagency to ensure that standards development processes are technically sound, independent, and responsive to broadly shared market and societal needs.

How will DoD effectively engage U.S. allies and other economic partners in standards-setting efforts?

Working through military-to-military arrangements, as well as with interagency partners, DoD continuously engages with NATO, Five Eyes, and other allies and partners to identify capacity needs, strategic acquisition for emerging technology, and continued innovation development in standards-setting efforts.

Additionally, DoD has formed strong partnerships through the U.S. Technology Training Institute (USTTI), which could be further leveraged in standards-setting efforts. USTTI is a public-private venture, established by statute, and under the Department of State. USTTI promotes U.S. priorities through a range of tuition-free courses, covering a broad range of subjects involving information and communication technology (ICT).

USTTI graduates become empowered and informed decision makers on information and communication technology matters and eventually serve as leaders within their governments as well as in international fora. At the World Radiocommunication Conference 2023, 60 delegations were led by USTTI graduates (as Head or Deputy), and over 300 total delegates had attended USTTI courses. USTTI has successfully developed enduring relationships across the globe. USTTI could provide a vehicle for DoD to build enduring relationships with foreign partners on matters pertaining to telecommunications.

In your opinion, what is the capacity of U.S. government agencies to implement the report's recommendations given current resources?

DoD is committed to working with interagency partners to meet the objectives of the NSSCET.

Please share any specific concerns DOD has regarding China's influence and growing role in setting global standards in other areas, such as Artificial Intelligence, that were not covered in the report.

DoD has broad concerns about the tactics used by the PRC in its drive to dominate global emerging technology sectors, including by utilizing international standardization processes to benefit Chinese industry. The PRC seeks to leverage advancement in technologies developed for

international standardization processes remain impartial, inclusive, technically sound, and responsive to broad market needs.

The report discusses how members of global standards bodies rejected Huawei's "new IP [intellectual property]" standardization proposal and cite this as a success and an example of limitations on China's current influence in global standards bodies. What is your department's assessment of the recent success of the United States and other nations in preventing the adoption of China's "new IP" proposal? In this light, what is your department's assessment of what China might advocate for next, including a possible revised attempt to press for this proposal?

DoD has consistently maintained that a multistakeholder community is best equipped to manage internet naming and numbering and other technical operations of the internet, and we remain concerned about challenges to this longstanding approach. The "New IP" example highlights that the United States and our partners, when aligned around shared objectives, remain able to prevent advancement of problematic proposals despite increased PRC engagement in international standardization bodies. We expect PRC entities will continue to seek to advance technology solutions and standards they developed. We will continue to work with U.S. stakeholders to ensure that international standardization processes remain impartial, inclusive, technically sound, and responsive to broad market needs.

Describe the effects on U.S. or allied participation in standards bodies where China has flooded with high rates of participants or submissions, such as the International Telecommunication Union (ITU).

The PRC has significantly increased its engagement in the standards development process - including high rates of both participants (where allowable) and submissions (as noted with ITU). For example, at the ITU's 2023 World Radiocommunication Conference, the PRC delegation was by far the largest in attendance and intervened at all levels throughout the conference, sometimes expressing sentiments contradictory to international norms and causing delays in otherwise productive discussions. DoD is engaging interagency partners to monitor the latest developments and work with private sector partners to oppose proposals that lack technical merit and rigor. To date, mitigations put in place to address such proposals have shown some success: proposals with low technical merit have not been accepted by these bodies, demonstrating that rules surrounding the consensus-based standardization process can continue to function as designed. However, responding to the PRC's efforts to influence standardization processes has created significant pressure on U.S. and other participants in the consensus-based system to both review a significant volume of proposals as well as increase presence at standards-setting conferences and events. Only with appropriate strategy, resources, and attention will the U.S. Government be able to protect the integrity of international standards development, as called for in the 2022 United States National Security Strategy.

are working closely with the private sector and academia to enhance standards education to ensure U.S. competitiveness in standardization processes.

Increase Worldwide Adoption of Fair and Transparent Standards

Promote further development of educational materials on best practices for international standards-making bodies.

DoD supports enhancing educational opportunities for standards stakeholders. We are currently engaging with standardization stakeholders on several related efforts. For example, DoD is actively supporting an Evolving Standards Landscape (EvSL) Initiative through the American National Standards Institute (ANSI) focused on four areas, including: Messaging, Standard Education and Training, Organizing and Convening, and dealing with the Politization of Standards Processes. This initiative includes an important component related to providing relevant educational materials for government and U.S. industry participants in international standards organizations.

Convene like-minded countries, companies, and other stakeholders to develop routine auditing processes for international standards creation.

Each international standards organization regulates within the confines of its own governance structure, which is agreed to by the participating membership. As these are consensus-based organizations, DoD and other like-minded stakeholders already work to ensure that the standards created by international standards organizations remain open, transparent, non-discriminatory, and balanced.

Encourage foreign talent to come to the United States to learn and train on standards development practices.

DoD has limited authority for training foreign talent on standardization but is supportive of outreach conducted by interagency partners, including the Departments of Commerce and State. DoD is actively involved in engaging interagency and international partners (e.g., NATO Allies) on standardization matters. DoD is continuously engaging with allies and partners bilaterally and multilaterally to provide training on defense standardization policies and procedures. For example, DoD recently collaborated with the Department of State to facilitate information exchanges on defense standardization with the Kingdom of Saudi Arabia. We also provided capacity building support to the Republic of Colombia on revitalizing its defense standardization programs.

Incentivize Greater U.S. Standards Participation

Commission a research effort to understand the barriers that may be holding back U.S. participation in international standardization work.

DoD supports efforts to identify barriers to U.S. participation in standardization. To that end, we are supporting interagency work led by NIST with ANSI to implement the U.S. Government National Standards Strategy for Critical and Emerging Technologies (NSSCET), including working with the private sector to identify challenges to U.S. participation and ways to address those challenges.

interagency partners to remove barriers to U.S. participation in international standards organizations. We support consideration of budgetary support for U.S. participants, so long as such support does not undermine the industry-led, market-driven nature of those standardization processes.

Establish funding for small businesses to participate in international standards development through tax incentives and grants.

DoD agrees that encouraging participation from U.S. small businesses would increase the chances that contributions to technical standards would be successfully adopted by the international community, benefitting U.S. companies and U.S. technology leadership. Financial costs are one of the major barriers to increased participation by U.S. companies in standards setting. Developing a single standard is often an expensive, multi-year effort. DoD will continue to work with interagency partners to explore ways to encourage greater participation by U.S. companies of all sizes.

List DoD initiatives to carry out the White House standards strategy.

In addition to supporting interagency work led by NIST to coordinate with the private sector to implement the NSSCET, DoD is actively participating in standards bodies addressing critical and emerging technologies. For example, DoD is engaged in technical specifications development in advanced wireless communications and network technologies through the ITU, the Institute of Electrical and Electronics Engineers, the Alliance for Telecommunications Industry Solutions, the Third Generation Partnership Program, and Open Radio Access Network Alliance. DoD is also improving collaboration between the hundreds of DoD participants in all standardization activities and working with interagency partners to evaluate mechanisms for further collaboration.

DoD is actively engaged in international standardization endeavors focused on innovation, interoperability, and document development policies and procedures with our allies and partners. For example:

- DoD is engaged in NATO committees and working groups supporting standardization activities and technological advancement of the Alliance, and working with Allies and partners on standards in support of the NATO Defense Planning Process.
- DoD is leading NATO efforts to review standardization processes to identify opportunities to enhance Allies' and partners' ability to innovate, maximize use of international standards, and insert new technologies within the Alliance.
- Previously, DoD led an effort to assess NATO's use of non-government standards and led revision of NATO's intellectual property rights policy to facilitate the use of international standards within NATO.
- DoD has communicated NSSCET priorities to Allies and partners in Europe via NATO and the Materiel Standardization Harmonization Team. DoD continues to monitor NATO-defined Emerging and Disruptive Technologies activities to ensure tenets of the NSSCET are considered.

DoD is reviewing and updating our defense standardization training offerings, evaluating international standardization training opportunities, and coordinating work with our interagency partners on government-wide training resources.

civilian use to bolster its military capability, in support of its objective to become a “world-class” military. Standardization efforts that strengthen the PRC’s industrial base would likely contribute to enhancement of the PRC’s military capacity. DoD remains committed to the efforts by the U.S. Government to ensure that standards development processes are technically sound, independent, and responsive to market and societal needs.

The report discusses the role of research institutes with ties to the People’s Liberation Army (PLA) in China’s standards development efforts and gives examples of several successfully generated standards by such entities. How does DOD track and respond to such developments, including PRC military-tied firms and those subject to U.S. government restrictions such as export controls or sanctions?

The PRC seeks to maximize the benefits of the country’s science and technology development for the PLA’s advantage, including by fostering greater collaboration across defense and civilian research communities and technology industries. DoD administers numerous mechanisms to track and highlight entities with ties to the PRC military. These mechanisms include DoD’s list of “Chinese military companies” operating directly or indirectly in the United States, issued in accordance with Section 1260H of the FY2021 NDAA, and lists of research institutions with ties to countries of concern, published in response to Section 1286 of the FY 2019 NDAA. These mechanisms serve as tools for U.S. entities to utilize when conducting risk assessments of their engagement with PRC entities. In addition, DoD strongly supports our interagency partners’ efforts to monitor PRC activity and engage directly with industry and other stakeholders to share relevant information about that activity.

How is China's state-led approach to technology development challenging the rules, norms, and approaches that the United States and international standards bodies take regarding standards development? How is this approach affecting longstanding multilateral trade agreements and trade negotiations that address standards, such as the Technical Barriers to Trade agreement? In which respects is China disruptive? How are China's state-led standards policies changing the way Chinese companies and institutions are engaging with standards bodies? Additionally, how are U.S. and other foreign companies limited in their ability to participate in China's standards-setting processes and market? What is your agency's perspective on China's use of standards as a tool for market protection, technology transfer, and mechanism for restricting foreign market access?

By seeking to capture expanded global market share in strategic sectors, PRC policies will likely create or exacerbate market distortions in the targeted markets and harm U.S. and other companies that cannot compete with firms receiving subsidies and other benefits conferred under these programs. As PRC firms become increasingly globally competitive, they likely will also continue to grow their participation in international standards setting, potentially to the detriment of U.S. and other stakeholders.

DoD has closely followed developments in the PRC’s domestic standards-setting processes, including the continued limitation of foreign participation in those processes. Many of the standards developed in the PRC are initially developed to serve the Chinese market and, because they are developed without representative foreign input, can serve as a barrier to entry for a range of foreign goods and services. The PRC seeks for standards developed in China to influence international standards. These factors underscore the importance of ensuring