



ASTM INTERNATIONAL  
Helping our world work better

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Ms. Alicia Chambers, Executive Secretariat  
Mr. David F. Alderman, Standards Services Division  
National Institute of Standards and Technology  
U.S. Department of Commerce

*Submitted via [www.regulations.gov](http://www.regulations.gov) to NIST-2021-0006*

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

NIST Docket Number 211026-0219

Dear Ms. Chambers and Mr. Alderman,

ASTM International is pleased to respond to the subject Request for Information (RFI) published in the November 4, 2021, edition of the *Federal Register*. NIST is seeking public comments to provide information for a study and resulting recommendations required under the FY2021 National Defense Authorization Act regarding “the effect of policies of the PRC and coordination among industrial entities within the PRC on international bodies engaged in developing and setting international standards for emerging technologies.”

ASTM International is a globally recognized leader in the development and delivery of voluntary consensus standards. Today, over 13,000 ASTM standards are used around the world to improve product quality, enhance health and safety, strengthen market access and trade, and build consumer confidence. ASTM International's leadership in international standards development is driven by the contributions of its 30,000 members. Working in an open and transparent process and using ASTM's advanced IT infrastructure, members create the test methods, specifications, classifications, guides and practices that support industries and governments worldwide.

ASTM International's open consensus process, using advanced internet-based standards development tools, ensures worldwide access for all interested individuals.

Regarding the first numbered theme presented in the RFI – regarding Chinese participation in international standards setting organizations – as of December 1, ASTM International can report that 933 individual members identify themselves as residing in China. Of the total, 70 members are students. The total members in China are arrayed across a wide variety of ASTM's 150 technical committees.

In some specific areas of emerging technology where ASTM is active:

- 12 individuals in China are members of ASTM Committee F38 on Unmanned Aircraft Systems
  - 1 represents a parent company manufacturing UAS technology. A U.S.-based representative of the company has been an active participant in standards development and offered technical proposals based on the company's priorities.
- 40 individuals in China are members of ASTM Committee F42 on Additive Manufacturing
  - 12 members are active voters on balloted items, but they rarely provide any additional feedback. None of the 40 are officers at the Committee or Subcommittee level.

Participation at the task group level, where Work Items (draft standards) are developed, is not monitored but is perceived to be at de minimis level if not zero.

- 1 individual in China is a member of ASTM Committee F45 on Robotics, Automation, and Autonomous Systems
  - This member is also a member of many other committees and appears to be simply monitoring developments
- 3 individuals in China are members of ASTM Committee F48 on Exoskeletons and Exosuits
  - These members participate from time-to-time in meetings of the Committee and are active voters on balloted items, but they are neither represented in the leadership of the Committee nor actively engaged in development of new standards

In summary, some Chinese members are involved in ASTM standards development in emerging technology areas, but none are seeking leadership roles on either technical or administrative matters. All technical proposals – including proposals based on proprietary approaches – are challenged by ASTM’s open, rigorous, consensus process which provides transparency, balance and other important safeguards that make it very difficult for any single interest to have undue influence in shaping ASTM standards.

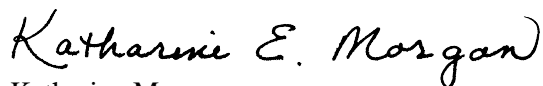
The fifth and final key topic posed in the RFI seeks, in part, recommendations on bolstering U.S. public and private-sector participation in international standards-setting bodies. ASTM International is such a body and welcomes participation from anyone. ASTM’s process follows the World Trade Organization principles for international standardization.

Membership models and procedures vary by standards development organization (SDO). Holding the technical relevance of each SDO to be equal, the more open to new members an organization is, the greater success the U.S. government may have in encouraging broader participation and engagement. When institutional barriers to entry are very low, all stakeholders, from the largest companies to the smallest, can participate on an equal basis in the process. In the case of the U.S., resulting voluntary consensus standards are often referenced into U.S. law and regulations, saving both government time and taxpayer money.

Some have suggested that the U.S. government help to fund strategic engagement in the development of international standards. In some instances, this could be useful to assist SMEs or other interests who possess technical competence but are under-represented in the process. For instance, ASTM has waived participation fees and funded travel for consumers representatives and for technical experts from developing countries. However, there are costs and risks to this approach. In our experience, we have found that keeping participation costs low and promoting greater use of virtual meeting and collaboration technology is a more effective approach for standards setting models of the future – particularly when travel is encumbered due to costs or public health advisories.

ASTM International welcomes the opportunity to share this information and we would be pleased to provide additional information as needed to assist in your efforts.

Sincerely,



Katharine Morgan  
President