

Phone: (202) 833-9339 **www.rtca.org** 

From: RTCA, Inc.

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Washington, DC 20036

December 6, 2021

Subject: RTCA Response to RFI titled, Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies, Docket Number 211026-0219

Dear Ms. Chambers,

RTCA is pleased to submit the attached comments in support of the NIST initiative titled Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies

RTCA is a private, not-for-profit association founded in 1935 as the Radio Technical Commission for Aeronautics, now referred to simply as "RTCA". We are the premier Public-Private Partnership venue for developing consensus among diverse, competing interests on critical aviation modernization issues in an increasingly global enterprise. We have provided the foundation for virtually every modern technical advance in aviation. Our products serve as the basis for government certification of equipment used by the tens of thousands of aircraft flying daily through the world's airspace. A Standards Development Organization (SDO), RTCA works with the Federal Aviation Administration (FAA) to develop comprehensive, industry-vetted and endorsed standards that can be used as means of compliance with FAA regulations.

Our deliberations are open to the public and our products are developed by aviation community volunteers functioning in a consensus-based, collaborative, peer-reviewed environment. As such, we evaluate applications for membership to RTCA and accept only those organizations/individuals who have a demonstrated background, and are actively working, in aviation.

If you have any questions or comments regarding this submission, please contact me at the above address/phone number.

Terry McVenes
President and CEO



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Response to NIST RFI titled "Study on People's Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies"

## **Request for Information**

To ensure that the broad perspective of the standards community informs the development of and aligns with government's future plans and approaches, this RFI invites stakeholders throughout the scientific research, advocacy, industry, and non-scientific communities, including the general public, to comment. The enumerated list of topics below covers the major areas about which NIST seeks comment and is not intended to limit the topics that may be addressed. Commenters may provide responses to other relevant issues, such as the extent to which the PRC partners with foreign governments or multinational corporations to promote technical standards that may advantage PRC companies, entities, or state objectives; the aims of the PRC in international standards setting organizations, including an analysis of Chineselanguage sources; the standardization strategy of the PRC, as identified in the stated intentions of the "China Standards 2035" plan, including how and to what extent that strategy has been implemented and has influenced PRC industry and academic sectors, including in the development of indigenous standards with international implications. Commenters may also offer comments on whether international standards for select emerging technologies (e.g., electronics, artificial intelligence, the Internet of Things (IoT), blockchain and financial technologies, clean energy technologies, and quantum information technologies) are being designed to promote or favor interests of the PRC, as expressed in the "Made in China 2025" plan, to the exclusion or disadvantage of other participants or in a way that may not result in the best technological solution. Responses may include any topic believed to have implications for the study.

- 1. The participation of the People's Republic of China in international standards setting organizations over the previous 10 years, including leadership roles in standards drafting technical committees, and the quality or value of that participation;
  - RTCA Response: RTCA accepts membership requests from organizations who are active in the aviation community, including regulators, OEMs, labor organizations, academic institutions, and R&D organizations (among others). We currently have at least 18 member organizations that are Chinese and fall into the category of Industry, Academic, and Government. Currently, there are no Chinese citizens who are in leadership roles within our Standards Development committees.
- 2. The effect of the standardization strategy of the People's Republic of China, as identified in the "China Standards 2035" plan on international bodies engaged in developing and setting standards for select emerging technologies, such as advanced communication technologies, or cloud computing and cloud services;
  - RTCA Response: We have had no reports from our various committee leadership teams of any undue influence being attempted by members from Chinese organizations.



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The process at RTCA builds consensus by organization, so any one organization can only assert a single opinion on any issue discussed by the committee, and therefore cannot promote undo influence over the rest of the committee membership.

- 3. 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;
  - RTCA Response: China has engaged in our Special Committee 159 (Global Navigation Satellite System) to discuss the BeiDou GNSS constellation. They would like it included in the SC-159 suite of documents that covers Dual Channel Multi-Constellation systems. Four constellations have been considered for the documents: GPS (U.S.), Galileo (Europe), GLONASS (Russia), and BeiDou (China). To date, only GPS and Galileo have demonstrated that the system satisfies a pre-defined list of pre-requisites (e.g., mature set of standards, publicly available and adequate performance data, etc.) China has requested that RTCA include BeiDou.

Currently, the committee is adding scope to its Terms of Reference to work with EUROCAE (a European Standards organization) jointly to develop a white paper that will evaluate BeiDou against the pre-requisites.

China is also active in our Special Committee 228 developing standards for Uncrewed Aerial Systems (UAS), Special Committee 236 working on standards for Wireless Avionics Intra Communication System (WAIC), and Special Committee 229 that has developed a standard for 406 MHz Emergency Locator Transmitters. These committees are developing standards that will have a major impact on U.S. industry.

- 4. How 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, and what may be the consequences;
  - RTCA Response: Most Chinese organizations appear to be following the committee discussions closely, but do not contribute to the level that would significantly affect the final standards documents. "Data gathering" would be a more appropriate characterization of their participation at RTCA than would "influencing".

It should be noted, however, that RTCA discovered in 2017 its standards were being offered for sale on websites that were hosted from Chinese servers without RTCA Authorization. Attempts to close the website through legal channels were unsuccessful.



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5. 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 standards-setting bodies.

RTCA Response: RTCA has successfully convened international standards development by maintaining transparent processes and supporting consensus driven decisions. We find transparency is a key tenet to support standards development with no one party dominating the published standard. Additionally, our structure of publication upon approval by our Program Management Committee, made up of technical experts from all areas of the aviation industry, provides strategic guidance to the standards as well as guarantees all stakeholders are heard before publication of a standard. This model of transparent, consensus driven decision-making should be a cornerstone of standard development activities, as it prevents or mitigates any single entity's influence over international standards setting bodies.