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*Via regulations.gov*

**RE: Comments of the International Code Council on the Study on People’s Republic of China (PRC) Policies and Influence in the Development of International Standards for Emerging Technologies**

Introduction

The International Code Council (ICC) is a nonprofit organization, driven by the engagement of its more than 64,000 members, that is dedicated to helping communities around the world and the global building industry provide safe, resilient, and sustainable construction through the development and use of model building codes (I-Codes) and standards used in design, construction and compliance processes. Most U.S. states and jurisdictions, federal agencies, and many global markets choose the I-Codes to set the standards for regulating construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment. ICC appreciates the opportunity to submit the following comments in response to the below topics included in the National Institute of Standards and Technology’s request for information (RFI) related to the Study on PRC Policies and Influence in the Development of International Standards for Emerging Technologies.

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.

It is widely recognized that, in recent years, China has increased its participation and leadership in international standardization activities and in promoting Chinese-developed standards globally. However, China’s increased engagement in the development of international standards is not an inherently bad development. Having China engaged in international harmonization can and should be considered a positive development – *provided that their standards development and conformity assessment systems remain open to international participation*. Because of the central role that the Chinese government plays in standardization – leading and funding standardization efforts to align with industrial policies – the Chinese government is in a position to pick winners and losers and limit the independent involvement of the domestic and international private sector in standards development.

The reach of the central government into the standards development processes that are designed to be private-sector led, namely the Association Standards, also leads to distortions through financial rewards to companies (many of which are partially owned or otherwise controlled by the government) that file standards development applications. Foreign-invested companies are also somewhat limited in their ability to independently develop Association Standards under the current regulatory environment.

Adding to this, the new “China Standards 2035” program will promote increased Chinese participation in the development of international standards as well as the internationalization of Chinese standards. Ultimately, it is preferable for China to participate in international standardization activities and embrace the use of international standards rather than encouraging the development of Chinese

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domestic standards that perhaps neglect consideration of harmonization with existing international standards.

It should be noted, however, that China's market is not fully open to non-Chinese conformity assessment service providers. In order to truly realize the benefit of harmonization with international standards, whether the development is led by a Chinese or non-Chinese entity, manufacturers of products that are designed to meet international standards should not be subjective to duplicative testing and certification processes in order to be used in different markets around the world. Today, most regulated products used in China must be separately certified by a Chinese certification agency, and testing performed by an accredited testing lab outside of China is frequently not accepted. Accredited certification bodies outside of China must register local offices in China in order to certify products for the Chinese market. Wider acceptance of internationally accredited overseas testing, inspection and certification bodies must be part of any international standardization strategy that claims to promote global harmonization.

#### 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

ICC has only recently become directly involved in international standardization work at the ISO level, accredited in 2021 to administer the U.S. Technical Advisory Group (TAG) to ISO/TC 59 on Buildings and Civil Engineering Works, and more recently took on the US TAG Administrator role for the TC's newly-formed subcommittee (SC 19) for prefabricated buildings. While it is too early to fully assess the impacts of the "China Standards 2035" plan because the implementing regulations are still under development, it may be of some value to recount our recent experience with the establishment of the new SC 19, chaired by a representative appointed by the Standards Administration of China (SAC).

Having recently released two standards, recognized as American National Standards, used in the offsite construction process (ICC/MBI 1200: Offsite Construction: Planning, Design, Fabrication and Assembly and ICC/MBI 1205: Off-Site Construction: Inspection and Regulatory Compliance), and with another (ICC 1210-202X Standard for Mechanical, Electrical, Plumbing Systems, Energy Efficiency and Water Conservation in Off-site Construction) currently under development, ICC had a keen interest in engaging in the work of this new subcommittee.

Currently there is no globally harmonized standard governing offsite construction, and while not normally viewed as a cutting-edge new technology like 5G or AI, offsite and/or modular construction methods can be used to more effectively utilize emerging technologies in the construction industry, such as more "green" or sustainable construction. When building components are constructed offsite rather than site-built, sustainability benefits are realized, including:

- Improved indoor air quality (particularly when building framing materials are not exposed to high levels of moisture during the construction process)
- Less waste generation when production is standardized and buildings are produced to precise requirements

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- Less disruption to external environment surrounding construction site
- Less waste and more opportunity for repurposing at the end of a building's useful life

Modular homes also show promise as an affordable housing solution, capable of curbing construction timelines and reducing costs. Modular construction can deliver projects 20 to 50 percent faster than traditional methods, which can provide cost savings of up to 20 percent.<sup>1</sup>

When the new subcommittee was proposed, SAC offered to schedule a webinar to brief members of TC 59 about its intent with regard to the new SC. In that briefing, it was abundantly clear that the intent was to create a standard for prefabricated building which would enable all such building – for global installation – to occur in China and be based on a monolithic set of standards. Many members expressed concern about this, since building regulations are very specific to each jurisdiction globally. The International Code Council, as the US TAG Administrator requested to share the chairing responsibilities with SAC, but this request was denied. ICC intends to be very involved in the development of any standards through this SC, because the reality is that any internationally-adopted standard will favor those industry and government leaders invested in their development, and will necessarily favor the manufacturers and service providers familiar with these standards.

### 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.

As illustrated above, it is difficult to argue that any party involved in international standardization activities is not promoting their own interests. The only difference in China is that there is a stated national goal to dominate in certain sectors, which is supported by an industrial policy funded by the state. This is not something that the US or any other government in the world is in a position to change. However, the US government, in recognizing the un-level playing field that this sets up for non-Chinese industries in key areas, can support its own companies and experts and encourage their participation in international standardization activities to ensure that the US interests are protected.

### 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

The most productive actions that the US can take to mitigate China's influence on international standards is to engage in active promotion of the international standards developed in the United States and to support the participation of US experts and SDOs in international standardization activities.

In the building and construction space, the challenge is definitely regulatory, and focused on the preference to first utilize national standards, and secondarily "international standards" which do not always include US-developed international standards or consider use of US products. Often countries

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<sup>1</sup> McKinsey & Company, *Modular construction: From projects to products* (June 2019); Galante, et. al., *Building Affordability by Building Affordably: Exploring the Benefits, Barriers, and Breakthroughs Needed to Scale Off-Site Multifamily Construction*, Turner Center for Innovative Housing at UC Berkley (Mar. 2017).

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whose regulations do allow “international standards” limit the definition to ISO/IEC standards (which are already disproportionately influenced by European standards). While the same type of support made available to Chinese organizations developing national and international standards is not feasible within the US system, the US government can help by facilitating increased support for the recognition and use of US standards and conformity assessment processes internationally.

For example, the language used in recent trade agreements, such as USMCA, related to standards and good regulatory practices, was impactful and should be used in future trade agreements. This language called for, among other things, a definition of “international standard” which includes US-developed consensus standards that meet the criteria outlined in the WTO Agreement on Technical Barriers to Trade. It also outlines the best practice process that countries should use when considering the adoption of new standards, including avoiding non-discrimination and offering ample transparency (including ability to comment) to global trading partners.

Beyond trade agreements, the federal government should support the use of US-developed consensus standards abroad through grantmaking at the US Agency for International Development and the Department of Commerce to support outreach by US SDOs, country-specific customization of US-developed consensus standards, adoption of the resulting standards abroad, and the implementation of those standards. In the construction arena, greater adoption of US building codes internationally would promote resilience and minimize the greenhouse gas impacts of future construction, especially in lower- and middle-income countries that do not enforce modern building codes.

Whether through trade agreements or grantmaking, encouraging governments to consider US-developed standards will also lead to increased market opportunity for US manufacturers whose products are designed to meet these high standards as well as service providers who are already familiar with the standards and therefore have a competitive advantage over service providers promoting less stringent standards. It would also help counterbalance the global adoption of Chinese national construction standards, which is often an implicit or explicit requirement for countries that accept funding through China’s Belt and Road initiative.

Maintaining copyright protection for codes and standards (standards) is also critical for non-profit standard development organizations (SDOs) to continue to develop high-quality voluntary consensus standards. These standards help assure health, safety, and quality of life for millions of individuals worldwide and several support clean technologies. US policymakers have considered voluntary standards so critical that federal law, supplemented by OMB Circular A-119, directs federal agencies to use voluntary consensus standards wherever possible in their procurement and regulatory activities in lieu of expending public resources developing government-unique standards.

SDOs support their standards development activities through revenues derived from the publication, sale and licensing of standards –made possible by copyright protection of the standards. It will be critical that the copyright of standards utilized in the export of clean technologies be protected.

Finally, the US government can more actively encourage and support US businesses to participate in international standardization activities to promote the more widespread use of US-developed international standards. Many US companies, including those in the design and manufacture of clean technologies, do not have the resources to actively engage in international standards development activities – an endeavor which can be time-consuming and costly. The result is that standards developed in Europe and China become more widely accepted and serve as the basis for more ISO and IEC

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standards (which are widely considered to be the most relevant “international standards” by many regulatory bodies around the world). One way to address this would be for NIST or other federal agencies to provide funding through industry trade associations to offset the cost of industry experts and SDO administrators to actively engage in international standards development activities. Industry trade associations, which have the knowledge and expertise within their membership to identify and recruit the appropriate expertise, and which are also frequently SDOs within the US system, are uniquely suited to be funded to carry out this work and expand US participation in international standards development activities.

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Thank you for the opportunity to provide comments. If you have any questions concerning ICC’s recommendations, please do not hesitate to contact me.

Sincerely,

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