US Seen Falling Behind China on Standards Work; Things Could Get Worse

Keeping pace with China on standards-setting for 5G and telecom in general is becoming more challenging, with the U.S. failing to keep up with huge investments China is plowing into standards work, speakers said during an FCBA webinar Wednesday. Congress and the Joe Biden administration are focused on ensuring strong U.S. participation in standards-setting work, but the U.S. isn’t catching up, they said.

U.S. leadership on standards is becoming “ineffective or ceremonial because the agenda is getting set by input contributions where the U.S. has had very little input,” said Brian Daly, AT&T assistant vice president-standards and industry alliances. When you tabulate the number of technical contributions, the U.S. is on the bottom, while China and Chinese companies are always on top, Daly said: “There’s no indication that this is going to change in the near future.” Huawei alone “boasts” it has 300 engineers working on standards issues, he said. Many U.S. delegates are nearing retirement age, while Chinese delegates “are fresh out of school” and will be involved for decades to come, Daly said. U.S. companies “are trying to do catch up most of the time” while Chinese companies “have put the resources in to set the agenda and drive it,” he said. China is recruiting new graduates for standards work, he said. U.S. universities “aren’t promoting standards or a standards career,” he said. A growing problem is that the U.S. government is making it difficult for Chinese delegates, in particular, to get visas to attend U.S. meetings, Daly said. That means most meetings are now being scheduled somewhere else, he said. Even ATIS-North America had to take meetings outside the U.S., he said: “We really need to solve this problem as soon as we can so that we can continue to host those meetings here.”

More than 50 telecom standards working groups are at the ITU “and that’s a whole lot for the federal government to cover, let alone the private sector, so it really is a challenge,” said Harris Wiltshire’s Tricia Paoletta. “Obviously, China has a lot more people than the United States. … They graduate a whole lot more engineers,” she said. “We have a broader education challenge” to “kind of increase our numbers at these various international standards bodies,” she said. “It is a challenge to have enough bodies from the FCC and NTIA to actually attend those meetings,” Paoletta said. Legislation before Congress urges the administration to increase participation in standards bodies, she said. “If the funding isn’t there to support government attendance, it’s not going to happen,” she said.
“Consensus, as squishy as it is, is a remarkable weeder out of bad ideas,” said Grace Koh, who led the U.S. delegation to the last World Radiocommunication Conference in 2019. The challenge is China has done a good job of inserting people into leadership positions, she said: “We’re not going to be in the room for everything.” China is also making a big investment in base research to support its policy positions, which the U.S. “should be doing as well,” she said.

Lisa Carnahan, associate director-IT standardization at the National Institute of Standards and Technology, noted NIST issued a request for information last year on how Chinese national standards policies impact the development of international standards for emerging technology. Some feedback “validated what many of us think,” she said: “It’s not about numbers, it’s about impact, and that’s always been true in standards and standards participation from way back when.” The participants coming in from China are reading the policies and procedures of the standards organizations “where some of us may have read them 10 years ago, 20 years ago,” Carnahan said. Something happens, and we say, “Hey, I don’t think they can do that,” she said. “Then we read the policies and procedures and realize ‘yes they can,’” she said: “It’s actually causing us to up our game, which is a good thing.”

The U.S. approach to standards development can best be described as “voluntary, consensus-built and multistakeholder,” said Koh, now Nokia vice president-legislative affairs. “What’s missing from this is top-down and government-led,” she said: “This goes to what the heart of a standard really is. It’s a voluntary agreement among stakeholders.” More participation is better, Koh said, noting 5G is the first global standard for communications. “4G was a battle between CDMA and GSM and that meant that your phone wouldn’t work on certain systems,” she said. Limiting participation by some stakeholders, including by companies from non-democratic countries, is “pretty antithetical to the voluntary consensus process and no one ultimately benefits from the regionalization of standards,” she said. “As the Hill and the administration continue to evaluate responses to challenges to the U.S.’s traditional leadership in technology innovation, presented by China in particular, but also from other regions of the world, the processes for standard setting for the next generation of technologies … have very much been under the microscope,” said Glenn Reynolds, ATIS vice president-technology policy and government relations. — Howard Buskirk