



China Sees Itself Widening the Gap with the United States in 6G Technology

OE Watch Commentary: With the rollout of 5G technology now underway and the United States cracking down on Huawei, China has been increasingly vocal about its determination to push forward with its plans to be the global leader in 6G technology one day. The accompanying two articles, both from the *Global Times*, discuss the viewpoints of some Chinese telecom industry analysts.

Ma Jihua, a veteran telecom analyst, argues that repeated attacks by the United States on Huawei are clear signs that China cannot afford to lose its race in 6G. He further describes 6G as a technology that will become the next decade's battlefield as countries want to take the lead and have a strong voice in the telecom market of the future. According to Ma, China's research in 6G "is more advanced than 5G due to a large and very sophisticated talent base, solid technical experience, and strong application demand." He explains that it will be "practically impossible for the US to leapfrog China in 6G" because of "the generational progress of telecommunication technologies" being based on advancement of technologies, application of technologies, and scales of application.

Another Chinese telecom industry analyst, Xiang Ligang, laid out his vision for a 6G roadmap. First, visions of 6G will come about by 2023. By 2026, technology standards will be set. By 2028, relevant technology will begin to launch. Finally, by 2030, commercial use of the network will begin.

According to Fu Liang, a Beijing-based telecom industry expert, the communications network of the future, including 6G, "will break the Internet centralization structure and prevent one company or companies from one government from establishing dominance."

The three telecom operators (China Telecom, China Unicom and China Mobile) in China have tripled their investment in 5G over the past year. Meanwhile, according to the second article, the coronavirus epidemic has stimulated China's policy support for 5G, along with increasing demand for a faster Internet to facilitate telecommuting, online education, and live streaming.

While 5G and its predecessors tend to be associated with cellular technology, *Global Times* states that 6G will mostly be used in areas that include the Internet of Things, autonomous vehicles, and smart factories. While neither article mentions potential military applications, 6G could also be a game-changer for military operations. **End OE Watch Commentary (Hurst)**

Source: Chu Daye and Ma Jingjing, "Huawei Confirms Early-Stage Investment in Futuristic Technology," *Global Times*, 31 May 2020. <http://www.globaltimes.cn/content/1190092.shtml>

Huawei Confirms Early-Stage Investment in Futuristic Technology

Ma Jihua, a veteran industry analyst, told the Global Times on Sunday that the repeated attacks by the US on Huawei are clear signs that China could not afford to lose its race in 6G.

"The generational progress of telecommunication technologies is based on advancement of technologies, application of technologies and scales of application," Ma said. "Given the concept that 6G will morph out of 5G, it would be practically impossible for the US to leapfrog China in 6G."

The US' repeated crackdowns on Huawei also hold important lessons -- that China cannot afford to lose the 6G race, which is why companies are simultaneously researching 6G while rolling out 5G, experts said.

Xiang Ligang, a veteran industry analyst, gave a roadmap of 6G development in China. There will be visions of 6G by 2023, technological standards will be set by 2026, the launch of relevant technology will take place by 2028 and preliminary commercial use of the network will begin by 2030.

Huawei said that 6G will be mainly used in sectors including the Internet of Things, autonomous vehicles and smart factories.

Source: Zhang Dan, "China Ramping Up Research into 6G," *Global Times*, 17 May 2020. <https://www.globaltimes.cn/content/1188617.shtml>

China Ramping Up Research into 6G," Global Times, 17 May 2020

Ma Jihua, a veteran industry analyst, told the Global Times on Sunday that 6G will become the next decade's battlefield as countries all want to take the lead and have a strong voice in the telecoms market of the future.

Fu Liang, a Beijing-based telecom industry expert, told the Global Times on Sunday that the communications network of the future, including 6G, will break the internet centralization structure and prevent one company or companies from one government from establishing dominance.

"...China's 6G research is more advanced than 5G due to a large and very sophisticated talent base, solid technical experience and strong application demand," Ma noted.

"The gap is widening, whether in the fiber-optic broadband technology or in mobile networks... If China uses a 'heavy machine gun' while the US holds a bow and arrow on the 6G battlefield 10 years from now, there won't be a competition between the two in the telecoms sector," he said.

Ma said that the three Chinese telecom operators have tripled their investment in 5G over the past year. The coronavirus epidemic has stimulated China's policy support for 5G, along with consumers' increasing demand for a faster internet during telecommuting, online education and livestreaming.