

CENTRE FOR JOINT WARFARE STUDIES



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ICT – CHINA'S 5G TECHNOLOGY

China-US Huawei 5G Standoff during Mobile Tech Summit. Robots, cars, drones and virtual-reality gaming sets connected by cutting-edge 5G networks were among the thousands of futuristic gadgets on display at this year's Mobile World Congress in Barcelona, Spain in March 19. While there is much excitement over how 5G will transform our everyday lives, the conference was overshadowed by the standoff between the United States and Beijing over the Chinese telecom giant Huawei, which the U.S. says could be used by the Chinese government for espionage. The U.S. State Department's Deputy Secretary for Cyber Policy Robert L. Strayer said: "We will continue to engage with these governments and the regulators in these countries to educate them about what we know and keep sharing the best practices for how we can all successfully move to next generation of technology. I'll just say there are plenty of options in the West." He also urged allies to do the same.

Comments. Washington has banned Huawei from 5G rollout in the United States, citing Chinese legislation requiring companies to cooperate with the state — raising fears Huawei 5G networks overseas could be used as a 'Trojan horse' to spy on rivals. Australia, New Zealand and Japan have followed Washington's lead and restricted Huawei's involvement in 5G. Europe remains undecided — but the industry needs clarity on the same. The really key aspects of 5G are the low latency communications, massive sensor and massive machine-to-machine communications, which are about industry and industrial uses. And as that gets into things like critical infrastructure, so there is a lot more non-personal or industrial data being used which really has people concerned. For example, military forces in countries like the U.S. will also leverage large parts of the commercial network.

Chinese firm Huawei is a big player in 5G network technology and also had a big presence at the Mobile World Congress. Huawei's management has said the company would never use 'back doors' for espionage — and the Chinese government has dismissed the accusations. The European community in particular and also the U.S.

have to clarify what these policies mean, what a ban would mean or what some kind of a partial ban would mean, if there's really a middle ground that can be found there because banning Huawei could possibly set Europe's 5G rollout back another two years.

(<https://www.voanews.com/a/mobile-world-congress-overshadowed-by-huawei-5g-spying-standoff-4804788.html>)

5G Modem Balong 5000 Chipset. Richard Yu, CEO of Huawei Consumer Business Group, unveiled the 5G modem Balong 5000 chipset in Beijing in Jan 2019. Chinese tech giant Huawei has announced plans to release a next-generation smartphone based on its own technology instead of U.S. components, stepping up efforts to compete with global industry leaders.



Thailand Launches Huawei 5G Test Bed. Thailand launched a Huawei Technologies 5G test bed, even as the United States urged its allies to bar the Chinese telecoms giant from building next-generation mobile networks. The 5G test bed in Thailand, the United States' oldest ally in Asia, will be Huawei's first in Southeast Asia. Mr Pichet, Thailand's minister clarified that it's cooperation with Huawei on the test bed does not mean Thailand is not concerned about security issues. This 5G test bed project is a testing period for Thailand, during which the nation can make observations which will be useful to either confirm or disconfirm the allegations.

The 5G test site is in Chonburi, the heart of the Thai military government's \$45 billion economic project - the Eastern Economic Corridor (EEC) - about 90 km southeast of Bangkok. Vendors like Nokia, Ericsson and Thai telecoms operators have also set up 5G labs at the site. U.S. embassy spokesperson in Bangkok said the US advocates for secure telecoms networks and supply chains that are free from suppliers subject to foreign government control or undue influence that poses risks of unauthorized access and malicious cyber activity.

Comments. Huawei has previously set up a cloud data centre worth \$22.5 million in Thailand's EEC, a centre piece of the government's policy to boost growth in the country that has struggled to attract foreign investors besides the Chinese. Ties between the United States and Thailand have cooled since the Thai military took power in a 2014 coup. Relations between Bangkok and Beijing, on the other hand have, warmed in recent years as evident from a pickup in defense trade and Chinese investment. Huawei, the world's top producer of telecoms equipment and second-biggest maker of smartphones, has been facing mounting international scrutiny amid fears that China could use its equipment for espionage, a concern the company says is unfounded. Huawei, which gets nearly half of its revenue from outside China, says it has secured more than 30 commercial 5G contracts globally. But it has not yet signed a 5G contract in

Thailand. Huawei is in talks with telecoms operators, to secure local partnerships ahead of a national rollout scheduled for December 2020. Possibly for Thailand, security concerns over Huawei's equipment would have been analysed in context to its competitive pricing versus that by U.S. firms

(<https://telecom.economictimes.indiatimes.com/news/thailand-launches-huawei-5g-test-bed-even-as-us-urges-allies-to-bar-chinese-gear/67897174>)

Overall Comments. In addition to security & espionage related concerns, the issue of IPR over 5G high end cutting technology is at the heart of standoff between USA and China.