Trump's 5G plan could put 'US at economic risk,' say analysts

President Trump's plan for a secure 5G network to combat Chinese spying could actually stall innovation in the country, experts warn.

By Conner Forrest | January 29, 2018, 11:55 AM PST

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- *The Trump administration's security team is considering a government-controlled 5G network to combat cyberattacks and economic efforts from China.*
- *FCC chairman Ajit Pai opposed the idea of a government-built 5G network, and other calling the idea a "costly and counterproductive distraction."*

The Trump administration is considering a government-built and operated 5G wireless network as an effort to combat Chinese spying, according to a Reuters report (https://www.reuters.com/article/us-usa-trump-5g/trump-security-team-sees-building-u-s-5g-network-as-option-

idUSKBN1FH103). The plan is still months away from consideration, but would aim to also protect against cyberattacks and economic threats.

According to the Reuters report, a senior official in the administration said that the government wanted to build the network "so the Chinese can't listen to your calls." The official later added that the US government has "to ensure the Chinese don't take over the market and put every non-5G network out of business."

However, that goal could backfire. While a government-called infrastructure could ensure the use of certain equipment, it could also lead to "slow deployment and innovation which could put the US at economic risk," said IP Architects president John Pironti.

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One of the concerns, in this case, is that the US carriers' use of Chinese network equipment could bring the possibility of security concerns, Pironti said, and building a government-run network could prevent that. However, Pironti said that it's more likely the US government will simply offer financial incentives to encourage US carriers to avoid using Chinese equipment, rather than building its own network.

Carriers should be able to build their own networks to meet their own needs and "should be allowed to innovate individually to create a competitive landscape that will be incentivized to create new products and features in expedient fashions," Pironti said.

FCC chairman Ajit Pai released an [official statement (https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0129/DOC-348903A1.pdf)](https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0129/DOC-348903A1.pdf) opposing a government run network as well. In the statement, Pai said that such a network or any similar effort "would be a costly and counterproductive distraction from the policies we need to help the United States win the 5G future."

In the Reuters report, the official did note that the White House would need to work with the telecom industry to figure out the best way to build such a secure network. However, Pironti said that the US government should instead collaborate more closely with industry leaders to determine any potential threats present in this equipment and offer an accreditation process for the equipment manufacturers so they can more easily sell to government customers.

There's also the issue of the physical probability of this kind of network. As 451 Research chief analyst Eric Hanselman said, currently only the standard for the radio portion of 5G exists, while the signaling and other aspects are still being settled. And there isn't much time to knock all that out.

"Gaining agreement and then building and deploying a separate network in the remainder of the current administration's term is highly unlikely," Hanselman said.

Additional spectrum issues also exist that could derail the plan. According to Gartner research vice president Mark Hung, the plan would focus on building a network using the mid-band spectrum (3.7-4.2 GHz), as opposed to the low-band currently used in commercial deployments. Using this band would be helpful in that "a single 500MHz block of spectrum that can enable multi-gigabit speeds, and wider coverage areas that could potentially reuse existing 4G infrastructure and reduce the need for network densification," Hung said.

But, as Hung noted, there are still serious technical hurdles ahead. Right now, "there's no 5G equipment vendor that is currently developing the necessary radio equipment to support the mid-band frequencies," Hung said. Additionally, no cellular modems being developed for 5G support the mid-band frequency either, Hung said.

Hanselman also posed the question of just what this kind of network could achieve. The goals are unclear, Hanselman said, and the idea of a secure network is vague.

"The investments necessary to build out 5G networks are already challenging and vendors are unlikely to rush to support a new format without hefty monetary incentives," Hanselman said. "This doesn't take into account the potential long term business impact of having yet another telephony standard that is incompatible with the rest of the planet."

Instead, Hanselman argued, a better idea would be to invest in security technologies to layer on

top of existing networks.

Bob Gourley, co-founder of the cyber security consultancy Cognitio and former CTO of the Defense Intelligence Agency, said that it is great that ideas around the security of 5G are being floated around, but the 5G standard is coming at the US quickly, and will only accelerate in its development once major carriers get the green light to formally offer the service.

Gourley said that the US government needs to be involved in making infrastructure more secure and resilient, but instead of building its own network it should working with providers to "grease the skids for a smooth takeoff so we can accelerate smartly."

In cyberspace, Gourley said, "industry has demonstrated they are much better at building in advanced functionality for innovation," and that is the best approach for a technology like 5G.

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About Conner Forrest

Conner Forrest is a Senior Editor for TechRepublic. He covers enterprise technology and is interested in the convergence of tech and culture.

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