



When Chinese Networks Spy On ' Users

May 07, 2019

By Jeff Ferry, CPA Chief Economist

On April 30th, global wireless telecom company Vodafone went public with a statement to [Bloomberg](#). The London-based wireless provider found “hidden backdoors,” i.e. multiple security flaws in the wireless network of the Chinese network provider Huawei.

The problem first surfaced in 2011 when Vodafone engineers found “backdoors” in Huawei broadband equipment in their Italian network. Backdoors are software access points which allow the network operator (in this case), or third parties like hackers or spies, to get into the network and potentially see the private data of users.

According to Bloomberg and a more in-depth [report](#) in British technology publication The Register in 2011 found that Huawei routers had a “hidden” backdoor that could be used by a malicious user to access that router but not the entire network. Huawei told Vodafone it would remove the backdoor. However, Vodafone later that year found it was still there. When Vodafone protested, Huawei then changed the backdoor needed to remain for network management purposes.

Vodafone Chief Information Security Officer Bryan Littlefair wrote up the situation this way in a report: “A major concern here is that actions of Huawei in agreeing to remove the code, then trying to hide it, are not what they need it to remain for ‘quality’ purposes.”

African Union

The story of spying at the African Union (AU) headquarters offers an equally worrying tale. A defense contractor built a network in the new headquarters of the African Union in Addis Ababa, Ethiopia for the 55 nations of Africa to work together. The new 19-story glass tower headquarters (above) was built by the Construction Engineering Corporation. The name of the network provider has not been revealed. Companies capable of providing a full-service wireline and wireless network are Huawei and ZTE. ZTE provided voice, video, and data services within the headquarters and high-speed connections to the rest of the world.

According to a [shocking article](#) in French newspaper Le Monde published on January 26, 2018, managers discovered in 2017 that the network was a giant listening device. Wrote Le Monde: “Our sources, each night the secrets of this institution were copied and stored more than 8,000 kilobytes on mysterious servers hosted somewhere in Shanghai.”

The espionage began in 2012 and continued nightly until 2017, when Union technology managers discovered it. According to Le Monde and the London Financial Times (FT), which independently [confirmed](#) the spying, the AU tried to avoid embarrassment by replacing the Chinese technology while publicly denying the espionage. The AU tech team added encryption to all their communications and stopped using Ethio Telecom, which was accused of electronic surveillance. According to Le Monde, when the Chinese engineers offered to configure the network, the managers thanked them politely—but did it themselves instead.

One angry senior African Union official told Le Monde: “We let them bug us and we did nothing about it for 24 hours out of 24. They planted lots of microphones and cyber-spying tools when they built the building.”

The FT pointed out that China has built much of the modern infrastructure across Africa, relying on massive investment budget President Xi pledged for Africa three years ago. That infrastructure includes roads, bridges, and telecom networks. Quoting a McKinsey report, the FT said there are 10,000 Chinese companies operating in Africa.

Writing for the Council of Foreign Relations, Africa analyst Mairlyn Fidler [commented](#) last year that the AU's efforts to address China's behavior demonstrates just how dramatically China's influence has narrowed in Africa.

this continues, African autonomy will take a real hit.”

In another media investigation, British technology publication The Register [revealed](#) that Huawei vulnerability in the software code in its broadband gateways (home routers) back in 2013, but it did not correct the problem. Huawei created a software patch to fix the problem on that specific model of software on all its broadband gateways. The result was that four years later, in 2017, Israeli Intelligence Point Research found that the [vulnerability](#) was being exploited by a hacker known as Nexus Zero to plant the Mirai virus on Huawei home routers in the US, Italy, Egypt, and elsewhere. That virus allowed actors to take out large sections of the Internet—although in this case no major outages were reported.

It's not clear whether Huawei dragged its feet on upgrading its broadband gateway software or if it had a hidden agenda for using that vulnerability. The Register sees it as “bungling” by the Chinese. In a recent summary of the affair, The Register made clear its doubts about Huawei's reliability: “British officials say while Huawei network equipment is not secure enough for government networks, officials say they will warn the general public to the potential risks present in Huawei gear.”

The problem for the UK, US, and other non-Chinese governments is that there is a very limited number of providers. A telecom company's relationship with its network provider is akin to a marriage. They are demanding before it selects its network provider, but once it has agreed to work with a network provider, they are stuck with each other for years. A nationwide telecom network can easily cost over \$100 million to install.

Even though the telecom company is the customer and writing the checks, once the network is installed, the telecom company can find it hard to get the network provider to do what it wants, as quickly as it wants. Changes or upgrades becomes a major engineering project. (Here's another [report](#) from Britain about Huawei.) For this reason, telecom companies always want to have two providers in their network as an alternative in case the situation gets bad enough that the telecom company wants either to “rip and replace” to throw out one network provider.

Aside from Huawei, there are only two truly full-service wireline and wireless network providers in Sweden. US allies like Britain and Germany have refused to go along with the US request to use Huawei on major networks partly because a third provider is a very useful weapon to keep the other two providers in check. They are always a subject of negotiation, timing issues are often more contentious. The telecom customer wants their installations, upgrades, or fixes, to be completed quickly; the network provider often sees it as a bargaining tool and then falls behind its own schedule.

The British government's decision to allow its large carriers to use Huawei in non-core parts of their networks is to offer a sop to Washington while at the same time allowing British telecom companies to keep Huawei as a bargaining tool.

As the above events show, this sort of compromise solution is likely to please neither the US gov't nor the telecom companies. It's also unlikely to deliver a truly secure service to local network users. The alternative provider, preferably one based in the US. A \$50 billion-plus a year market can support

See also this [2018 article on Chinese IP theft](#)



Be The First To Comment

Sign in with

 Facebook

 Twitter

Or sign in with email

Email Address

Password

Remember me

POST YOUR COMMENT

or [Create an account](#)



Custom Search

NAVIGATE

Who We Are
Act Press
Attend Member
Login

SOCIAL MEDIA

CONTACT US

PHONE: **202.688.5145**
EMAIL: info@prosperousamerica.org



© 2019 COALITION FOR A PROSPEROUS AMERICA. ALL RIGHTS RESERVED

Website by VOXARA

