

CENSA Working Group Report: The Future of 5G

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BACKGROUND

U.S. concerns regarding the security of emerging technology developed and provided by foreign companies is likely to increase in the future as the world becomes more technologically interconnected. The U.S. experience with Huawei and the potential national security implications associated with the purchase of Huawei technology—both by allied and non-allied countries—serves as an important example of the challenges faced by the U.S. as more non-U.S. companies sell critical technologies that will power the world.

By using the recent U.S. – Huawei experience as an example of a challenge that is likely to become more common for the U.S., we sought to answer several questions including:

1. Can the U.S. trust or distrust any company only because of where that company originated?
2. Given the uncertainty regarding trust, how can the U.S. work to convince other countries—both allies and non-allies—to not use a particular technology provider?

ANALYSIS

Distrusting a company only because of its country of origin poses several problems. First, as the U.S. encourages free trade and an interconnected global economy, refusing to do business with a technology provider, for no other purpose than the fact that the company is in a country with adversarial relations to the U.S., undermines the U.S.-led global order. Second, as the Edward Snowden leaks revealed, the U.S. had worked closely with the U.S. domestic technology sector for intelligence purposes. While, in the minds of U.S. policymakers, this cooperation is significantly different from that of China and Huawei (i.e. none of the U.S. corporations are state-owned enterprises), does the rest of the world see—or care—about this difference? Consequently, many countries may view U.S. efforts to persuade them not to use certain technology providers as hypocritical.

From a U.S. perspective, however, it appears reasonable to distrust a company based on its origin. If there's even a one percent chance that the company is engaging in malicious behavior on behalf of its country of origin, the expected cost would likely outweigh the expected benefit given U.S. access to other technology providers. A wealthy country like the U.S. may be willing to pay a premium to lower their risk, but for many countries, cost is more important.

Regardless, if the U.S. is concerned about foreign technology providers outcompeting U.S. providers, the U.S. must make its technology sector more competitive. Based on recent experiences, it appears that Huawei—and other foreign companies—have a competitive advantage

due to their lower costs. And many countries use cost as one of—if not the key—determinants in deciding which technology provider to select. The Nord Stream 2 pipeline represents an example of how European countries were willing to compromise their national security concerns in return for cheaper access to natural gas.

RECOMMENDATIONS

If countries are unwilling to listen to or do not care about U.S. concerns, the only way to appeal to these countries' interests is to offer a similar product at a lower cost, or to offset the costs countries would pay for purchasing a higher-priced U.S. product. Four initial options to manage the cost issue are:

1. Subsidize the relevant U.S. technology sectors. In today's current political climate, support for such an option is likely very low.
2. Rebate the countries that purchase higher-priced U.S. technology. In essence, the U.S. can cover the cost difference between the higher-priced U.S. technology and the lower-priced foreign technology. However, is this any different from bribing/is it ethical?
3. In the case of allies, the U.S. can sell the technology in return for lower allied contributions to defense commitments. For example, if NATO countries purchased technology from the U.S., the U.S. will no longer ask them to increase their military spending relative to GDP.

An interesting case study to explore, which may provide some insights relevant to current challenges, is the case of SpaceX and the birth of the U.S. private space industry. Similar to today, the U.S. needed to build its own domestic cost-effective space launch capacity as an alternative to relying on a foreign country (in this case Russia). The efforts taken in the U.S. to build this capacity may reveal a potential pathway to follow for future challenges.

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