RISK #5
EXACERBATION OF THE BATTLE FOR TECHNOLOGICAL DOMINANCE

An intensifying battle for technological dominance is among the top risks for Eurasia in 2020. The Astana Club survey respondents believe that the US and China will increase mutual restrictions and protectionist measures in the contest for technological leadership trying to undermine each other’s competitive edges.

The remaining players will not just observe from the distance. Countries’ desire to ensure their cybersecurity will trigger a cyber-weapons race. This will inevitably lead to development of the new tools that can be used against adversaries.

United States vs China

The US-China battle for leadership over new-generation technologies is steadily growing in scope, opening new frontiers for their global rivalry. The White House considers Beijing’s Made in China 2025 strategy not only as a major element of competition in high-tech markets but also as a strategic challenge to US global leadership.

In this context, the US trade war against China goes far beyond the parties’ market-access controversy. Washington is also trying to limit its main competitor’s technological potential by imposing import barriers upon Chinese producers. In 2020, the US will increasingly encourage its European allies to follow the same path.

However, this will not jeopardize China’s aspiration to become a leader in exporting cutting-edge technology that is not inferior to Western technology and has an obvious price advantage. The battle over using 5G technology to gain access to telecom markets of third countries has demonstrated the potential of Chinese tech giants like ZTE and Huawei.

Most developing countries that plan to launch 5G networks are using Chinese equipment. Some developed nations like Australia and the UK. Besides, Chinese developers have a competitive advantage in artificial intelligence and biotechnology.

According to various estimates, US companies have earned more than $125 billion from 4G technologies. The potential profit from 5G networks will be even higher. China is already ahead of its main competitors in developing a new generation of mobile communication technology. By the end of 2019, at least 150,000 5G base stations will be installed in China, compared to only 10,000 in the United States.

Washington is convinced that China illegally collects data on US advanced technologies, and more importantly, on key industrial sectors, using cyber espionage and technology transfer requirements.
Although US actions are perceived negatively in China, Beijing cannot respond symmetrically. Due to its dependence on imports of semiconductor chips and other electronic components from the US and developed countries, China cannot close its market to Western technologies.

The implications of the US–China tech race for the rest of the world

The intensifying battle over technological dominance will have mixed effects on other states that depend on foreign technologies. At the same time, there is a low probability that two completely independent systems in the global technology market will emerge.

It would require the reconfiguration of the global supply chain system, which seems impossible in the context of the growing volatility of financial markets, slowing global economic growth, tense trade relations, and high level of external debt in many countries.

Countries which have banned or are considering to ban Huawei products

The US ban on Huawei products showed that many countries are unwilling to sacrifice their economic relations to accommodate interests of military-political allies. While New Zealand, Australia, Japan and France have followed the US lead in banning Huawei from working on critical national infrastructure, Germany, Canada, and the UK have refused to initiate a total ban. The Czech government has just voiced some
concerns, simply warning its citizens that they could face potential security risks when using Huawei equipment.

Consumer products and internet-of-things devices are widespread today, and many of them already contain components that are partially made in China. Obviously, not all countries that launched joint investment projects with the Chinese side in the field of telecom infrastructure will be ready to abandon Chinese solutions or individual components.

In the context of growing struggle for technological dominance, most countries will refuse to make a clear choice in favor of one side. This means that the technological split of the global market is unlikely to happen soon. However, rivals’ areas of influence can be seen already by now.

The Chinese Belt and Road Initiative, which also includes Digital Silk Road, presupposes that the majority of countries situated along the BRI, including the countries of Asia, the Middle East, Africa, and even some European states, will become more oriented to use Chinese technologies.

Meanwhile, Western Europe, Canada, Australia and Asian countries such as Japan, that want a continued US military and economic presence in the Pacific to counterbalance China’s growing influence, will continue embracing American technology.

However, this emerging split line is not final. Many recipients of Chinese development aid want to see more US and Western technology come to their country so avoid total dependence on China.

Nevertheless, China’s major advantage is that it can offer new technology to developing countries at affordable prices. Thus, most countries will not take any side. They are more likely to continue using both countries’ technological equipment until circumstances force them to make a clear choice.