

5G in Europe and South Korea: navigating the tech power landscape

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Europe is awakening from its naivety, as said by the European Union Commissioner for Internal Market Thierry Breton. The ongoing US campaign against Huawei, with US Secretary of State Mike Pompeo encouraging allies to shut the Chinese tech giant out of their markets, appears to be gaining ground in Europe. Europe has become increasingly aware of the national security risk posed by the dependence of its supply chains on China. This sense of vulnerability was further exacerbated by the COVID-19 pandemic, which laid bare delays and alleged export restrictions of medical equipment and protective gear mainly produced in China.

In 2019, European telecom operators have launched twenty 5G networks in nine European countries and eighty more networks are expected in 2020. At this time when intensive 5G roll-outs are planned across Europe, the US campaign has brought to the fore questions about secure 5G equipment procurement. Germany remains hesitant about its approach to China, while others such as France, Belgium and the UK appear to be aligning with Washington. Earlier this year, these countries announced that Huawei's equipment in their networks will be partially or completely banned by phasing it out until the end of the decade. For France, the move is rather in the spirit of "European digital sovereignty" according to French president Macron. Macron has said to favour European solutions and in-house tech producers,

The US campaign against Huawei has brought to the fore questions about secure 5G equipment procurement, at the time when intensive 5G network deployment is planned across Europe. The EU has accelerated its work on 5G & cyber policies and has published a "toolbox" to identify high-risk vendors. While Europe rethinks its relationship with China and its stance on the campaign, others are turning towards trusted suppliers such as South Korea's Samsung Electronics which has recently obtained 5G equipment supply contracts with several countries. South Korea and the EU are navigating an increasingly competitive landscape with economic and diplomatic pitfalls, as well as opportunities. As they face growing and divisive pressures from the US and China, the EU and South Korea are committing to multilateralism.

such as the Swedish Ericsson and Finnish Nokia.

EU Executive Vice-President Margrethe Vestager, in charge of the digital portfolio, showcased ambitions for Europe to become one of the leading markets for artificial intelligence powered by industrial data. In its approach to cybersecurity, the EU has

acknowledged that the digital transformation has a strong security dimension. Since March 2019, the European Commission has worked on drafting a risk assessment with member states and, in January 2020, it published a non-binding “toolbox” of risk mitigation measures to determine and avoid high-risk vendors. The classification criteria include, among others, transparency of company ownership and risk of subjection to “interference from a non-EU country” through government control or other means. Further, the Commission published in June its Digital Services Act package. The package intends to update the EU’s legal framework for digital services which has been unchanged since 2000. The Act will include legal obligations to protect the rights of users of digital services and to regulate large online platforms acting as gatekeepers, such as Google and Facebook. It will be published later this year, but it is already being touted by some as what could be the next landmark win for the EU in setting standards, following its globally well-received General Data Protection Regulation (GDPR).

Governments are turning towards trusted suppliers as they deploy their 5G networks. South Korea, as one of EU’s strategic partners and technological frontrunner in 5G, is a good candidate. Earlier this year, South Korea has announced its Digital New Deal which focuses on economic growth and development of its digital economy. South Korean President Moon Jae-in has unveiled an ambitious 5G plan which aims to foster strong domestic tech companies, such as Samsung Electronics and SK Hynix, in collaboration with international partners. Samsung Electronics, the world’s top memory chipmaker and smartphone vendor, has announced plans to increase its presence in the telecom equipment market. This plan was showcased with the announcement of a US\$ 6.6 billion deal with Verizon for the supply of 5G equipment. South Korea has contracts to supply Canada, New Zealand and the US with 5G equipment, and more orders are expected to follow from Europe as Chinese competitors are increasingly hit with restrictions. While Samsung’s

market share is predicted to increase, it is unlikely to reshape the global 5G suppliers’ landscape soon as Chinese and European players continue to dominate.

A complication for South Korean chipmakers, however, is the US Commerce Department’s sanctions on the supply of US technology which has become effective as of 15 September. It restricts the sale of chips developed with US software, technology or design, and obtaining a license could take up to one year - if it is granted at all. Samsung Electronics and SK Hynix have thus suspended their shipments to Huawei. This was not an easy decision as Huawei is one of Samsung’s five largest customers and accounts for 17 percent of South Korea’s electronic parts exports in 2019. While the short-term business losses are predicted to be significant, industry analysts say that in the long-term Samsung will be able to benefit at Huawei’s expense and become a dominant 5G network supplier by obtaining new clients and bigger orders. Depending on how long the US sanctions will stay in place, Huawei is planning to continue business with the chips it has in stock. This also causes concern for European clients who have contracts with Huawei and are wary of delayed or unfulfilled orders for their own time-sensitive network roll-outs.

The diplomatic arena is not any easier to navigate for South Korea. In a conference meeting on 8 September, South Korean Foreign Minister Kang Kyung-hwa called diplomacy with the US and China a “very tough task” in the current climate. Kang reiterated a commitment to safeguard the security alliance with the US and to further develop a strategic partnership with China. South Korea’s foreign policy will continue to be geared toward strengthening multilateralism in an effort to find shared interests between the US, China and the international community at large. This sentiment was echoed by EU High Representative Josep Borrell at the EU Cyber Forum on 14 September, where he stated that “The pressure on Europe to choose sides is growing. As EU we should follow our own

approach and avoid being instrumentalised by one or the other. We should continue to stand for multilateral solutions and search common ground.”

As the United States and China seek to redefine their influence on key technologies, South Korea and Europe are leaning towards a diplomatic strategy of avoiding risk and retaliation, while investing domestically on strengthening their global tech champions. Since the EU’s Strategic Outlook defined China as a partner, competitor and rival, Europe has been rethinking its relationship with China. And this is now accelerating as the geopolitics of connectivity are observed. Europe has begun to turn to other strategic partners and in-house producers for the build-up of a European 5G network. There is also a need to work together on unified technical standards

and rules for data governance. EU as a regulatory superpower has the capability to fill this need and intends to shape 5G standards which also appeal to South Korea, i.e. globally unified standards which support inclusiveness. With a strategic approach of building inclusive digital economies based on a rules-based market and international cooperation, EU and South Korea demonstrate a similar vision. The G7 meeting, which the US plans to host later this year, will shed more light on how unified the major economies are on reshaping their global supply chains in the face of hardening competition, and linked to this, who will be setting the global rules and standards in emerging technologies. South Korea is awaiting to see whether US President Donald Trump extends an invitation to join the meeting in what would be a historical first.

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