

China's Digital Authoritarianism vs. EU Technological Sovereignty: The Impact on Central and Eastern Europe

By Marta Makowska, *Analyst, European Union Program, Polish Institute for International Affairs*

One of the major avenues of China's interaction with Central and Eastern European states has been the Digital Silk Road (DSR) initiative, established in 2015 and part of China's massive Belt and Road Initiative. DSR is in some ways a complement to Beijing's Made in China 2025 strategy, a Chinese national industrial plan that aims at transforming China into a high-tech global powerhouse. But in Central and Eastern Europe, as in Western Europe, North America, Australia, and parts of Asia, the DSR has run into roadblocks as countries are concerned about their digital sovereignty and about other potentially negative implications of allowing Chinese firms to build their telecommunications infrastructure.

Globally, the DSR has involved many different projects, from Chinese support for Chinese firms building local telecommunications industries to China supporting "Smart Cities" in other countries to Chinese building of undersea cables to connect different regions to high-speed broadband.¹ Beijing clearly wants to become a global standards setter in many cutting-edge technologies such as AI, the IoT (Internet of Things), and 5G, and it has used both the DSR, as well as other major loans and other types of support, at home and abroad, to make its own firms competitive in these areas and to get other

¹ See for example: Rebecca Arcesati, "E-government and Covid-19: Digital China goes global," Mercator Institute For China Studies, March 17, 2022, <https://merics.org/en/short-analysis/e-government-and-covid-19-digital-china-goes-global>; and Justin Sherman, "Beijing's Growing Influence on the Global Undersea Cable Network," *The Jamestown Foundation*, China Brief Volume: 21 Issue: 18, September 2021, <https://jamestown.org/program/beijings-growing-influence-on-the-global-undersea-cable-network/>.

countries to adopt China's standards for a range of high-tech industries, including telecommunications.²

Yet as China has expanded its ambitions, leaders from a range of countries in Central and Eastern Europe, as well as many other parts of the globe, have worried that Beijing could use its influence over 5G and telecommunications infrastructure in problematic ways. These worries have arisen because Beijing has become much more authoritarian at home, creating a digital surveillance state within China. In addition, many democratic leaders have worried that Beijing could use its foothold in countries to get other states to adopt the China internet model – a closed, and heavily filtered, version of the internet.

Initial Interactions Between Central and Eastern Europe and Huawei

In the 2010s, China made inroads into telecoms and many other high-tech sectors in Central and Eastern Europe (CEE). The enlargement of the European Union in 2004 to add ten Central and Eastern European states encouraged several Chinese companies – principally Huawei – to enter those developing markets and use them as potential bridges for wider European ventures, especially those involving EU funding.³

Huawei, and to a lesser extent ZTE, in the 2000s and much of the 2010s tailored their approaches to specific Central and Eastern European states and often succeeded in getting contracts to build infrastructure and in selling consumer products and providing back-end support.⁴ For instance, ZTE has been active in Romania since 2001, and has established a sales office in Bucharest.⁵ In 2003, it set up a subsidiary with the aim of developing an alternative landline operator to the state-owned Romtelecom.⁶ Eventually, this venture turned out to be unsuccessful due to the insufficient political

² Maja Björk and Tim Rühlig, "Power competition and China's technical standardization," and Carlo Fischione et al., "AI and IoT Developments in China and the Relevance for EU Policy – a scoping study" in Tim Rühlig (ed.): *Assessing China's Digital Power and its Implications for the EU* (Berlin: Digital Power China, 2022).

³ Zoltan Turai, "China in Central and Eastern Europe," Centre for European Policy Analysis, March 2018, <https://cepa.org/china-in-central-and-eastern-europe/>.

⁴ Alicja Bachulska, "Poland: hardening stance," in Ivana Karaskova (ed.): *Huawei in Central and Eastern Europe: Trends and Forecast* (Prague: CHOICE, 2021), p. 11.

⁵ "Romanian Minister Welcomes ZTE in Romania," *ZTE*, May 2005, https://www.zte.com.cn/global/about/magazine/zte-technologies/2005/5/en_222/161483.html.

⁶ Teodora_Andreea_Aldea, "PostTelecom, concurenta pentru RomTelecom," *CARIERE*, August 13, 2003, <https://revistacariere.ro/inspiratie/cover-story/posttelecom-concurenta-pentru-romtelecom/>.

support from the Romanian government that would have served as a guarantee for the Import-Export Bank of China loan.⁷

Since 2003, Huawei has opened offices in Romania, Poland, Hungary, the Czech Republic, Latvia, and other regional states.⁸ Huawei's reasoning for opening these offices was twofold. First, opening these offices enabled Huawei to build relationships with domestic telecommunications companies. Second, the CEE expansion was an economic move to concentrate in the region Huawei's European operations such as sales and marketing (Poland), technical support for all of Europe (Romania), and manufacturing (Hungary).⁹ Central and Eastern Europe served Huawei as a prime location to base its European operations, partly because Central and Eastern European states have a reservoir of highly educated engineers and inexpensive workforces.

Huawei also got involved in infrastructure projects in the region. In 2005, Polish operator P4 (now Play) welcomed the company to jointly develop a 3G network. The investment was co-financed with a loan of 150 million euros from Beijing's state-controlled China Development Bank (CDB).¹⁰ In 2008, P4 acquired another loan from CDB of 490 million euros to establish the first Polish 3.5G network.¹¹ In Hungary, Huawei was granted significant public telecommunications contracts like creating a unified emergency calling system in 2013¹² and creating a LTE450 mobile network in 2015, the latter being built together with a Hungarian state-owned company.¹³

⁷ Jan Drahokoupil et al., "Chapter 7: Chinese investment in Romania and Bulgaria" in Jan Drahokoupil (ed.): *Chinese investment in Europe: corporate strategies and labour relations* (European Trade Union Institute, 2017).

⁸ Jan Drahokoupil et al., "Chapter 11: Huawei in Europe: strategic integration of local capabilities in a global production network," in Jan Drahokoupil (ed.): *Chinese investment in Europe: corporate strategies and labour relations* (European Trade Union Institute, 2017), p. 215.

⁹ Jan Drahokoupil et al., "Chapter 11: Huawei in Europe: strategic integration," p. 216.

¹⁰ Wojciech Piechocki, "Kredyt dla P4 – oficjalny komunikat operatora," *GSM Online*, November 3, 2006, <https://gsmonline.pl/artykuly/kredyt-dla-p4-oficjalny-komunikat-operatora>.

¹¹ "Chińczycy dali kredyt Play na budowę sieci 3,5G," *ComputerWorld*, June 19, 2008, <https://www.computerworld.pl/news/Chinczycy-dali-kredyt-Play-na-budowe-sieci-3-5G,156027.html>.

¹² Vlagyislav Makszimov, "Hungary's emergency infrastructure hardware built by Huawei," EURACTIV, November 8, 2019, <https://www.euractiv.com/section/5g/news/hungarys-emergency-infrastructure-hardware-built-by-huawei/>.

¹³ "MVM selects Huawei, Antenna Hungaria to deploy LTE network," *COMMSUpdate*, September 10, 2015, <https://www.commsupdate.com/articles/2015/09/10/mvm-selects-huawei-antenna-hungaria-to-deploy-lte-network/>.

Huawei started selling phones and other personal electronic devices in Poland in 2011. It won many consumers for its handsets by delivering robust customer service: it often had more local offices and service outlets in the CEE region than European and U.S. handset makers.¹⁴ Within seven years, in 2018, it became the number one smartphone seller in Poland. It lost its position to another Chinese firm, Xiaomi, in 2019, mainly due to U.S. sanctions on Huawei, which prevented the newer Huawei phones from utilizing the Android operating system.¹⁵

Huawei also established strong links with academic institutions in Eastern and Central Europe, links that have survived despite growing concerns among regional governments about the company's background and the security ramifications of its potential involvement in telecommunications networks. For example, Huawei has established ICT Academies with several Polish schools, such as Leon Kozminski Academy (Warsaw), Lodz University of Technology, Jagiellonian University (Krakow), and Krakow's University of Science and Technology (AGH).¹⁶ The cooperation is supposed to enhance student skills, provide links between students and IT businesses – and, to be sure, provide Huawei with access to some of the smartest students in the country.

Chinese Tech Investment in Central and Eastern Europe Beyond Huawei

China's overall investment in Central and Eastern Europe pales in comparison to Beijing's investment in the larger economies of Western Europe.¹⁷ China's strategy of investing and acquiring promising European startups in high-tech areas also has been concentrated mainly in the large Western European economies. One of the few examples of China investing in high-tech startups in Central and Eastern Europe occurred in Estonia, which had signed a Digital Silk Road Memorandum of Understanding with China in 2017, designed to foster cooperation in e-commerce, digital services, fintech, and other related

¹⁴ Agnes Szunomar, Joanna Karas, and Iulia Monica Oehler-Sincai, "Huawei in Central and Eastern Europe: Strategic Partner or Potential Threat?" in Wenxian Zhang, Ilan Alon, Christoph Lattemann (ed.): *Huawei Goes Global Volume II: Regional, Geopolitical Perspectives and Crisis Management* (Palgrave Macmillan, 2020), p. 110.

¹⁵ Urszula Ziełńska, "W Polsce Huawei pokonany przez chińskiego rywala," *Rzeczpospolita*, February 7, 2020, <https://cyfrowa.rp.pl/smartfony/art16930771-w-polsce-huawei-pokonany-przez-chińskiego-rywala>.

¹⁶ Politechnika Poznańska, "Huawei ICT Academy at the Poznan University of Technology the Best in Poland in 2021," December 3, 2021, <https://fem.put.poznan.pl/en/artykul/huawei-ict-academy-na-politechnice-poznanskiej-najlepsza-w-polsce-w-roku-2021>.

¹⁷ Agatha Kratz et al., "Chinese FDI in Europe: 2021 Update," Rhodium Group, April 27, 2022, <https://rhg.com/research/chinese-fdi-in-europe-2021-update/>.

areas.¹⁸ The same year, China's Didi Chuxing, a ride-sharing giant, invested in the Estonian ride-sharing company Taxify (now called Bolt).¹⁹

Besides Huawei, other major Chinese tech investors in Central and Eastern Europe have been the computing giant Lenovo and consumer electronics firm Xiaomi. Xiaomi has been a beneficiary of governmental concerns about Huawei and their security, Huawei's inability to source certain products from the United States, and bans on Huawei in many European markets. As a result, Xiaomi managed to capture forty-two percent of the 5G smartphone market in Central and Eastern Europe in 2021.²⁰ In Poland, Croatia, and Lithuania it has gained the largest share of the local smartphone market.²¹ However, some European states, like Lithuania, have begun to raise concerns about the security of Xiaomi phones, and eventually Xiaomi could face some serious problems in the European market too.

The reasons for the popularity of Chinese electronic devices in Central and Eastern Europe are not hard to understand. The companies offer competitive prices on products that utilize advanced technology.

Rising European Concerns About China's Digital Authoritarianism Spreading Across Europe

In the 2010s and early 2020s, major Chinese tech companies made inroads into Western Europe as well, signing a wide range of contracts to provide telecommunications infrastructure, surveillance equipment, and other products. Huawei got its first major contract in the Netherlands, with Dutch mobile operator Telfort in 2004, to develop a 3G network.²² Then, in the United Kingdom (which was then still a part of the EU), it became a supplier of devices aggregating and connecting consumer lines

¹⁸ "Urve Palo signed three economic treaties with China," Ministry of Economic Affairs and Communication of the Republic of Estonia, November 27, 2017, <https://www.mkm.ee/en/news/urve-palo-signed-three-economic-treaties-china>.

¹⁹ "China's Didi invests in Taxify, an Uber rival operating in Europe and Africa," *TechCrunch*, August 1, 2017, <https://techcrunch.com/2017/08/01/chinas-didi-invests-in-taxify/>.

²⁰ Harry Menear, "Xiaomi tops Central and Eastern European 5G smartphone sales," *MobileMagazine*, October 6, 2021, <https://mobile-magazine.com/mobile-operators/xiaomi-tops-central-and-eastern-european-5g-smartphone-sales>.

²¹ Nilanshu Basnet, "Xiaomi leads the smartphone market in 12 countries in Q1 2021," *TechSathi*, May 22, 2021, <https://techsathi.com/xiaomi-leads-the-smartphone-market-in-12-countries-in-q1-2021>.

²² Alexandra Harney, "Huawei wins 3G contract from Telfort," *Financial Times*, December 9, 2004, <https://www.ft.com/content/7b42f14e-4a0a-11d9-b065-00000e2511c8>.

for British Telecom.²³ As a result of the European Union initially welcoming Chinese tech investment, today more than 50 percent of the EU's 4G gear is Chinese,²⁴ and four European countries – Belgium, Cyprus, Lithuania, and Malta – relied exclusively on Huawei's wireless infrastructure for those 4G systems.²⁵ As the Danish research firm Strand Consult estimates, "Forty percent of Radio Access Network equipment between 2016-2019 has been purchased from Huawei and ZTE. A conservative estimate suggests that replacing the Huawei and ZTE equipment purchased since 2016 will cost \$3.5 billion."²⁶

However, countries in Western Europe are increasingly cutting Huawei out of bidding for 5G contracts, because of concerns that Huawei's infrastructure could be used for spying by China and is generally insecure, and because of fears of China having greater control of wireless technology in Europe.

This was not always the case. Work on the 5G standard began on the EU level in 2012, when the European Commission provided 50 million euros for research on wireless 5G technology. Part of this money was granted to the international consortium METIS (Mobile and Wireless Communications Enablers for the Twenty-twenty Information Society) of which Huawei has been a member.²⁷ Huawei's later involvement in European research and preparation for the implementation of 5G networks was accelerated by high-level political events. In 2015, following a European Union-China High-Level Trade and Economic Dialogue, the two sides announced a joint declaration affirming strategic cooperation related to building 5G mobile networks.²⁸

²³ Nic Fildes, "How Huawei Used the UK to Become a Global Giant," *Financial Times*, December 7, 2018, <https://www.ft.com/content/16381afa-f986-11e8-8b7c-6fa24bd5409c>.

²⁴ Iain Morris, "Europe's dependence on Huawei laid bare in new study," *LightReading*, June 30, 2020, <https://www.lightreading.com/5g/europes-dependence-on-huawei-laid-bare-in-new-study/d/d-id/762040>.

²⁵ "Four European countries have only Chinese gear in 4G networks, researcher says," *Reuters*, June 30, 2020, <https://www.reuters.com/article/us-europe-telecoms-china-idUSKBN241187>.

²⁶ StrandConsult, "Understanding the Market for 4G RAN in Europe: Share of Chinese and Non-Chinese Vendors in 102 Mobile Networks," <https://strandconsult.dk/understanding-the-market-for-4g-ran-in-europe-share-of-chinese-and-non-chinese-vendors-in-102-mobile-networks/>.

²⁷ "The EU Initiative METIS Paves The Way For The Mobile And Wireless Communications System For 2020 & Beyond," PR Newswire, November 27, 2012, <https://www.prnewswire.com/news-releases/the-eu-initiative-metis-paves-the-way-for-the-mobile-and-wireless-communications-system-for-2020--beyond-180987511.html>.

²⁸ "The EU and China signed a key partnership on 5G, our tomorrow's communication networks," European Commission, September 28, 2015, https://ec.europa.eu/commission/presscorner/detail/es/IP_15_5715.

Following that agreement, Huawei began to sign a wide range of contracts to build 5G infrastructure across Europe – it offered technology that came with competitive pricing and with high quality standards. In 2015, it also launched a European Research Institute in Leuven, Belgium to re-enforce its ties with European decision-makers who could potentially approve 5G projects.²⁹ As Huawei won more contracts, some European Union states initially tried to ignore or downplay the potential risks of bringing in a company long rumored to have close connections to the People’s Liberation Army, and in an environment, under Xi Jinping, where the line between the Chinese state and private firms was blurring.³⁰

By 2018, pressure was mounting from the United States on the EU to decouple itself from Huawei and other Chinese vendors of telecoms infrastructure, and some EU countries were beginning to have their own concerns. Many European states banned Huawei from building their 5G networks.³¹ The EU took other protective measures as well. In 2019, another piece of legislation, the EU Cybersecurity Act, provided a certification framework that ensures ICT products, services, and processes comply with specified requirements in the EU.³² In January 2020, the European Commission presented a “EU Security Toolbox for 5G,” designed to guide EU states in how to make decisions about contracting and building their 5G infrastructure.³³ The guidance document recommended, among other things, to avoid or limit dependency on a single supplier and avoid dependency on suppliers considered to be high risk, a term understood to apply to Chinese vendors.³⁴ Later that year, the European Commission and the United States issued a joint statement on the convergence between the EU’s Security Toolbox for 5G and the U.S. Clean Network Initiative, which was established to form an international coalition of states

²⁹ “Huawei announces the launch of its European Research Institute (ERI) in Leuven,” Chinese Embassy in Belgium, May 7, 2015, <https://china.diplomatie.belgium.be/fr/actualites/huawei-announces-launch-its-european-research-institute-eri-leuven>.

³⁰ Kathrine Hill, “Huawei CVs show close links with military, study says,” *Financial Times*, July 7, 2019, <https://www.ft.com/content/b37f0a9e-a07f-11e9-a282-2df48f366f7d>.

³¹ Lucrezia Poggetti, “EU-China Mappings: Interactions between the EU and China on key issues,” Mercator Institute for China Studies, January 20, 2021, <https://merics.org/en/short-analysis/eu-china-mappings-interactions-between-eu-and-china-key-issues>.

³² “The EU Cybersecurity Act,” European Commission, April 17, 2019, <https://digital-strategy.ec.europa.eu/en/policies/cybersecurity-act>.

³³ “EU Toolbox for 5G security,” Publication Office of the European Union, March 2021, <https://op.europa.eu/en/publication-detail/-/publication/7def1c03-da16-11eb-895a-01aa75ed71a1/language-en>.

³⁴ “Secure 5G networks: Questions and Answers on the EU toolbox,” European Commission, January 29, 2020.

and companies committed to high standards of data privacy and a willingness to protect consumer and corporate data privacy against potentially malign actors.³⁵

Another European area of concern about Chinese technology is the omnipresence within the European Union of surveillance equipment made in China, such as CCTV cameras, which have been installed in multiple European cities. However, unlike the United States, the EU has taken, until recently, a more cautious approach to jettisoning surveillance systems made by Chinese firms. In 2018, former U.S. president Donald Trump signed a bill banning Hikvision and Dahua, leading Chinese surveillance equipment makers, from public procurement in the United States, and in 2019, the Trump administration imposed sanctions on twenty-eight Chinese tech companies, including Hikvision and Dahua, because they were reportedly involved in abuses committed in Xinjiang.³⁶ As for the EU, so far the boldest move against Chinese security firms has been the European Parliament's resolution to ban Hikvision cameras from the Parliament's building in 2021.³⁷ In the United Kingdom, parliament has increasingly considered banning Hikvision from public buildings, and some ministries have done so.³⁸

Some European officials also are concerned about the cybersecurity risks resulting from the penetration of the EU market of digital consumer products (such as mobile phones and small home devices) by Chinese vendors.³⁹ One example of these concerns was the decision by the Lithuanian government to tell its citizens to throw away Chinese mobiles last year, as a result of the findings of the Lithuanian National Cyber Security Center, which tested 5G mobiles from Chinese manufacturers and

³⁵ "Meeting between U.S. Under Secretary of State Krach and Commissioner Breton on Secure Telecommunications Infrastructure and Digital agenda," European Commission, September 30, 2020, https://ec.europa.eu/commission/commissioners/2019-2024/breton/announcements/meeting-between-us-under-secretary-state-krach-and-commissioner-breton-secure-telecommunications_en.

³⁶ Ana Swanson and Paul Mozur, "U.S. Blacklists 28 Chinese Entities Over Abuses in Xinjiang," *New York Times*, October 7, 2019, <https://www.nytimes.com/2019/10/07/us/politics/us-to-blacklist-28-chinese-entities-over-abuses-in-xinjiang.html>.

³⁷ "EU Parliament Removes Hikvision, Citing Human Rights Abuses," IPVM, April 29, 2021, <https://ipvm.com/reports/hik-eu>.

³⁸ Sylvia Hui, "UK: Concerns raised over Chinese surveillance camera film," *AP*, April 26, 2022, <https://apnews.com/article/technology-business-europe-religion-china-5cd07e9518704d3c0225d11c76c384f2>.

³⁹ Laurens Cerulus, "EU commissioner: 'We have to be worried' about Huawei," *POLITICO*, December 7, 2018, <https://www.politico.eu/article/ansip-we-have-to-be-worried-about-huawei/>.

claimed to find built-in censorship tools in Xiaomi devices and security flaws in Huawei phones.⁴⁰ Due to rising diplomatic concerns and robust U.S. sanctions, the Huawei handset business in the EU has collapsed since 2021.⁴¹ However, at the same time, there has been a sharp rise in handset sales by other Chinese companies: OPPO and Xiaomi.⁴²

Decoupling From Chinese Technology in Central and Eastern Europe

The Trump administration applied significant pressure on countries in Central and Eastern Europe to avoid using Chinese 5G technology. In 2019 and 2020, the United States signed politically binding declarations on 5G network security with Estonia, Poland, Romania, Bulgaria, the Czech Republic, Latvia, Slovakia, Slovenia, and Lithuania. Signatories declared that they would use only trusted and reliable suppliers for building their 5G networks. Although these agreements did not explicitly name any Chinese vendor as specifically excluded from building 5G networks, the wording of the agreements made it clear that it would be hard for Chinese firms to win contracts for 5G construction in these countries.⁴³

The first CEE country to raise security concerns about Huawei and ZTE was the Czech Republic in 2018.⁴⁴ Its National Authority on Cyber and Information Security (NUKIB) published a public warning focused on the legal status of those companies and their ties to the People's Republic of China.⁴⁵

The effect of the memoranda was not immediate, but in the longer term, they will essentially exclude Chinese vendors from the network infrastructure of these states, just as they are being excluded from

⁴⁰ "Lithuania urges people to throw away Chinese phones," *BBC*, September 22 2021, <https://www.bbc.com/news/technology-58652249>.

⁴¹ "Huawei Revenue sees biggest ever fall," *BBC*, August 6, 2021, <https://www.bbc.com/news/technology-58104614>.

⁴² Jan Strykaj, "Europe Smartphone Market in Q3 2021: Samsung Holds on Despite Challenging Climate," Counterpoint, November 3, 2021, <https://www.counterpointresearch.com/europe-smartphone-market-q3-2021>.

⁴³ See for example: "Wspólna Deklaracja USA i Polski na temat 5G," Kancelaria Prezesa Rady Ministrów RP, September 2, 2019, <https://www.gov.pl/web/premier/wspolna-deklaracja-usa-i-polski-na-temat-5g>.

⁴⁴ "Czech Republic National Cyber and Information Security Agency Warning on Huawei and ZTE," Public Intelligence, February 10, 2019, <https://publicintelligence.net/cz-ncisa-huawei-zte/>.

⁴⁵ Ivana Karaskova, "Czech Republic: resolute hesitation," in Ivana Karaskova (ed.): *Huawei in Central and Eastern Europe: Trends and Forecast* (Prague: CHOICE, 2021), <https://chinaobservers.eu/huawei-in-central-and-eastern-europe-trends-and-forecast/>.

the network infrastructure of many Western European countries, including the United Kingdom.⁴⁶ Already, in 2021, Estonia,⁴⁷ Lithuania, Romania,⁴⁸ and Slovakia⁴⁹ introduced legal provisions based on the EU's Security Toolbox for 5G. For instance, Lithuania banned "unreliable" vendors from new 5G contracts by requiring technology suppliers to be screened according to national security interests. Huawei will be considered unreliable in Lithuania due to the fact that even private Chinese firms share information with the Chinese government, potentially jeopardizing Lithuania's national security.⁵⁰ Poland⁵¹ and the Czech Republic⁵² are currently working on finalizing similar regulations.

Hungary, however, has increasingly become an outlier in the region on 5G. While most of the other CEE countries gradually severed or downgraded their ties with Huawei, in late 2019, Hungary's minister of foreign affairs, Peter Szijjarto, announced that Huawei will develop Hungary's 5G system, despite pressure from the United States.⁵³ In 2021, Hungary's Innovation and Technology Ministry signed a memorandum of understanding with Huawei Technologies Hungary for a long-term cooperation on digital transformation of education and the development of 5G and fixed networks, among other things.⁵⁴

⁴⁶ "Huawei to be removed from UK 5G networks by 2027," GOV.UK, July 14, 2020,

<https://www.gov.uk/government/news/huawei-to-be-removed-from-uk-5g-networks-by-2027>.

⁴⁷ James Barton, "Estonia Aligning with Europe against Huawei," *Developing Telecoms*, November 26, 2021, <https://developingtelecoms.com/telecom-business/telecom-regulation/12394-estonia-aligning-with-europe-against-huawei.html>.

⁴⁸ "Romania: Draft 5G legislation receives government approval," CMS Law-Now, April 19, 2021, <https://www.cms-lawnow.com/ealerts/2021/04/romania-draft-5g-legislation-receives-government-approval>.

⁴⁹ "Amendment to the Cybersecurity Act," Lansky, Ganzger Partner, <https://sk.lgp-lawyers.at/de/news-de/amendment-to-the-cybersecurity-act/>.

⁵⁰ "Lithuania bans 'unreliable' technologies from its 5G network," LRT, May 25, 2021, <https://www.lrt.lt/en/news-in-english/19/1417429/lithuania-bans-unreliable-technologies-from-its-5g-network>.

⁵¹ Elżbieta Rutkowska, "Oddala się aukcja pasma na sieć 5G," *Dziennik Gazeta Prawna*, April 14, 2022, <https://serwisy.gazetaprawna.pl/telekomunikacja/artykuly/8401254.aukcja-5g-pasma-uke-ustawa-o-ksc.html>.

⁵² Jana Magdanova, "Český telekomunikační úřad nepodepsal dokument k bezpečnosti 5G sítí, který sám vymyslel," *iRozhlas*, February 15, 2022, https://www.irozhlas.cz/zpravy-domov/ctu-cesky-telekomunikacni-urad-dokument-bezpecnost-5g-site-internet_2202151410_pik.

⁵³ "Hungarian minister opens door to Huawei for 5G network rollout," *Reuters*, November 5, 2019, <https://www.reuters.com/article/us-hungary-telecoms-huawei-idUSKBN1XF12U>; and Lesley Wroughton and Gergely Szakacs, "Pompeo warns allies Huawei presence complicates partnership with U.S.," *Reuters*, February 11, 2019, <https://www.reuters.com/article/us-usa-pompeo-hungary-idUSKCN1Q0007>.

⁵⁴ "ITM, Huawei sign MoU on long-term cooperation," *Budapest Business Journal*, October 27, 2021, <https://bbj.hu/business/industry/deals/itm-huawei-sign-mou-on-long-term-cooperation>.

The European Union's Quest for Technological Sovereignty

With ambitions of accomplishing technological sovereignty, the EU has introduced a number of strategies and legislations to become more independent from particular third countries – in particular, China – in terms of strategic value chains, rare minerals dependencies, and certain high tech areas.⁵⁵ It also generally wants to be more competitive globally in a range of high-tech areas. Because of rising concerns about the dangers of Chinese network components and other Chinese telecoms products and high-tech products, the EU in 2020 introduced a framework designed to scrutinize inward foreign direct investment, a framework similar to ones that already exist in the United States and Australia.⁵⁶ Also, the EU's 2020⁵⁷ and 2021 Industrial Strategy reports identified numerous areas in which European industry was falling behind that of world leaders, including cloud computing, data storage, and semiconductors.⁵⁸ The strategy envisaged concrete actions to finance EU firms to become more competitive in these cutting-edge industries. In 2022, the EU passed the European Chips Act, which set aside robust amounts of public and private investment within the EU to develop European semiconductor manufacturing capacity.⁵⁹ In addition, in December 2021, the EU announced its new Global Gateway strategy, a robust infrastructure initiative that aims to reduce the gap in infrastructure connections worldwide, as well as strengthen the resilience of the EU's supply chains.⁶⁰ The project, which is supposed to initiate projects worth up to 300 billion euros until 2027 both from the EU budget

⁵⁵ "A Europe fit for the digital age," European Commission, https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age_en.

⁵⁶ "EU foreign investment screening mechanism becomes fully operational," European Commission, October 9, 2020, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1867.

⁵⁷ "European Industrial Strategy," European Commission, https://ec.europa.eu/growth/industry/strategy_pl.

⁵⁸ "Commission launches alliances for microelectronics and cloud technologies," European Commission, July 19, 2021, <https://digital-strategy.ec.europa.eu/pl/node/10165>.

⁵⁹ "European Chips Act," European Commission, https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-chips-act_en.

⁶⁰ "Global Gateway: up to €300 billion for the European Union's strategy to boost sustainable links around the world," European Commission, December 1, 2021, https://ec.europa.eu/international-partnerships/news/global-gateway-eu300-billion-european-unions-strategy-boost-sustainable-links-around-world_en.

as well as from public-private partnerships in the member states, could serve as a competitor to China's Digital Silk Road in some developing countries.⁶¹

What is Next for China in the Region After the War in Ukraine?

China's support for Russia's invasion of Ukraine may be a defining moment for the future of EU-China relations. For most Central and Eastern European states, the war, and Beijing's embrace of Moscow, will result in a further political decoupling from China. This will have an impact on economic relations as well: The reception of Chinese tech companies in these countries, already under severe pressure, will suffer even further scrutiny. Perhaps, more Chinese firms will be banned from Central and Eastern European markets.

What's more, China's cooperation with Russia will further mobilize Central and Eastern European policymakers, particularly those from the Baltics and Poland, to advocate for deepening strategic cooperation on security infrastructure with the United States and other like-minded governments across the world, beyond already existing NATO cooperation.

Decoupling from technology made in China will likely be costly both in economic and political terms, but without addressing its own vulnerabilities to the potential problems caused by allowing Chinese firms to build its network infrastructure, the EU will not be able to assert its sovereignty, even within its borders. Central and Eastern Europe, which in general is digitally lagging behind Western Europe, but at the same time is developing economically at a much faster speed, is particularly in need of effective legislative and economic measures to counteract China's aggressive digital agenda.

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⁶¹ See: Elżbieta Kaca, "The EU's Global Gateway Strategy: Opportunities and Challenges," Polish Institute of International Relations, February 17, 2022, <https://www.pism.pl/publications/the-eus-global-gateway-strategy-opportunities-and-challenges>.