

A COVID-19 Moment for Technological Sovereignty in Europe?

by Jean-Pierre Darnis

The COVID-19 pandemic has triggered important debates about technological and industrial sovereignty in Europe. The lack of essential equipment such as respiratory devices and protective gear underscored the weaknesses of supply chains largely dependent on Chinese producers.

Beijing's political mismanagement of the crisis and a more general lack of trust in the regime compounded this supply problem. While a lack of supplies in certain European states can also be explained by bad planning, China quickly became something of a scapegoat for a general discontent with the lack of stocks and slow replenishing times.

Chinese technology has faced increased scrutiny and criticism since 2019 and Chinese firms have historically been accused of duplicating western technology without respecting intellectual propriety laws.¹ This

¹ See Debora Halbert, "Intellectual Property Theft and National Security: Agendas and

perception leads to a global assumption of unfairness when speaking about trade with China.² Most recently, the US government has advocated a strong position against Chinese technologies for 5G networks, arguing that the main Chinese tech companies such as Huawei and ZTE are directly controlled by the Chinese Communist Party and thereby represent a potential threat when managing sensitive data.³

Assumptions", in *The Information Society*, Vol. 32, No. 4 (2016), p. 256-268.

² Yabing Huang, "Multinationals' Experiences in China: Fairness and Unfairness", in Quingyun Jiang, Lixian Qian, Min Ding (eds), *Fair Development in China*, Cham, Springer, 2017, p. 243-253.

³ See Lorenzo Mariani and Micol Bertolini, "The US-China 5G Contest: Options for Europe", in *IAI Papers*, No. 19|16 (September 2019), <https://www.iai.it/en/node/10717>. See also Kadri Kaska, Henrik Beckvard and Tomáš Minárik, *Huawei, 5G, and China as a Security Threat*, Tallinn, NATO Cooperative Cyber Defence Centre of Excellence (CCDCOE), 2019, <https://ccdcoe.org/library/publications/huawei-5g-and-china-as-a-security-threat>.

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Even if these two issues are not directly correlated, they are feeding a narrative of strong mistrust and criticism of China, underscoring the need for increased control over supply chains to ensure a degree of technological independence. This is all the more so given the important uses of technology to mitigate the spread of the pandemic, as digital tools have allowed societies to maintain basic functions even during periods of closure and social distancing.

Debate about technological sovereignty in Europe has topped the agenda of the new European Commission.⁴ President Ursula von der Leyen announced her ambition to establish a “geopolitical commission”, an expression which refers to the will to reinforce the European Union as a geopolitical entity able to face large states such as China, the US or Russia. Commissioner Thierry Breton has insisted on the development of technological and industrial sovereignty as part and parcel of such goal.⁵

A few days before the outbreak of COVID-19 in Europe, the Commission presented its data strategy, an extended document that aims to affirm the EU’s role in the field of data production, regulation and management. The strategy calls for increased control of data by the EU, in order to foster endogenous economic development

but also to further translate EU democratic principles into the digital domain.⁶

The COVID-19 crisis is likely to serve as a catalyst for a further upgrading of these efforts. Supply disruptions have been a rude wake-up call for Europe. Reactions have largely been nationalistic, with each country ramping up production of necessary equipment, but the European space has not remained idle, with the EU ensuring mobility of goods and a functioning internal market.

From all sides, voices are today pleading for a return to various forms of technological and industrial sovereignty: from pure autarchy to more sectorial policies, the whole European political spectrum is asking to re-localize production. The pandemic has opened the black box of supply chains, allowing us to understand the numerous issues linked to dependence on Chinese industries. While the European economy takes a nose dive, political leaders have stressed the importance of protecting an ever broader set of companies from foreign take-overs and acquisitions.

COVID-19 has also accelerated some key aspects of EU digital policy. Since the outbreak, a lot of thinking has gone into whether to follow Taiwan, South Korea or Israel in the development of a contact tracing application based on mobile phone technology that can help manage the post quarantine period through the monitoring of individuals.

⁴ Jean-Pierre Darnis, “Europa e Italia alla prova della sovranità tecnologica a digitale”, in *AffarInternazionali*, 23 January 2020, <https://www.affarinternazionali.it/?p=77508>.

⁵ Jacques-Olivier Martin and Bertille Bayart, “La stratégie de l’Europe pour rester la première puissance industrielle mondiale”, in *Le Figaro*, 2 March 2020.

⁶ European Commission website: *A European Strategy for Data*, <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy>.

Countries initially started to develop apps on a national, if not regional, basis, but the European Commission quickly jumped in, proposing a set of common guidelines.⁷ This is to avoid situations in which member states create non-compatible systems, which in turn would end up re-creating borders.

In this context, Franco-German convergence around the PEPP-PT European initiative, a common standard, is presently taking shape.⁸ The decision to develop a European standard for this app means that France and Germany will not adopt the Apple/Google standard, indicating that these countries wish to distance themselves from US tech giants and their almost monopolistic behaviour.

This geopolitical position on the issue of digital apps recalls the fact that “data sovereignty” was already present as a concept within the EU data strategy unveiled in February. Different projects to develop a “European Cloud”, such as the German-led GAIA-X programme, also demonstrate growing efforts for data sovereignty.

All of this confirms the priority given to technological sovereignty in Europe, but also reminds us of the hardship of shaping united policies on the continent.

⁷ eHealth Network, *Mobile Applications to Support Contact Tracing in the EU's Fight against COVID-19. Common EU Toolbox for Member States*, 15 April 2020, https://ec.europa.eu/health/ehealth/key_documents_en.

⁸ Bruno Sportisse, “Contact Tracing: An Overview of the Challenges”, in *INRIA News*, 18 April 2020, <https://www.inria.fr/en/node/1030>.

Overall, the COVID-19 crisis has triggered a remarkable mobilization aimed at avoiding acquisitions of companies by non-EU parties that could result in security issues and undermine sovereignty. There is a push to broaden the regulations once used to protect defence and aerospace companies to a broader range of strategic sectors.⁹ Germany has already blocked a US company acquisition of CureVac, a German vaccine producer. The Italian “golden share” protective measure has recently been widened beyond defence and security companies to include telecoms and energy networks as well as health companies.

Two mechanisms could help promote “technological sovereignty” in Europe. The first, could be an intergovernmental negotiation aimed at identifying key technologies and companies within the European supply chain, and reaching an agreement about who maintains which technologies on a EU basis. It seems rather difficult, if not impossible, to imagine such a “multilateral” negotiation process, however, given the high number of parameters to be taken into consideration.

A second mechanism could be to focus on what was once called the “first tier” of aerospace and defence companies, and extending this concept to other tech players and companies which fit the new enlarged concept of industrial and technological sovereignty expressed by the Commission and member

⁹ European Commission, *Coronavirus: Commission Issues Guidelines to Protect Critical European Assets and Technology in Current Crisis*, 25 March 2020, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_528.

states (energy, networks, automotive, telecoms, chemical, engineering and health). European companies such as Airbus, Thales, Leonardo, Indra, but also ATOS, Bosch, EDF, ENEL, ENI, Total, E.On, Engie, Telefonica, Bayer, to name a few, represent a pool of technological and economic capabilities which have always been considered strategic and thereby worthy of protection by different member states.

They often also aggregate start-ups or foster the development of technological spin-offs. Working in a transnational mode, they maintain extensive know-how in terms of operating in different member-states, both for consumers and shareholders. In addition, representatives from member states often sit on the boards of each other's national companies. A conference gathering first tier European companies could therefore help create and promote "technological sovereignty" which could then be extended to the whole supply chain.

The size, expertise and capital of these companies would help promote policies that can counterbalance the challenges represented by non-European tech giants in the US or China. There could also be benefits from the transformation of what were once known as "aerospace and defence" companies, but are now broadening their reach by heavily investing in digital services. Parallel to this, an effective mechanism needs to be developed to take into consideration small and medium-sized enterprises related to these "first tier" companies as a means to account for the interests of EU member states without "first tier" players.

COVID-19 has confirmed that technology applies to all kinds of strategic applications, even when not directly linked to defence, calling for a broader "strategic" definition of industries, product and technologies.

Enhanced action by the European Commission can provide tools and budgets to help increase technological independence at the EU level. Here it might be sound to develop what the Commission already manages best, such as research and innovation funding. Even if some progress has been made, a simplified financial and management structure could further unleash the potential of EU research funding. Several mechanisms can be deployed to help hard hit industries such as aeronautics. Among these, it would be helpful to provide extra funding for innovation and future programmes. Even if the industry is deeply damaged by today's crisis, strong investments in research and development are an insurance policy for maintaining scientific and technical capabilities, also helping to retain qualified human resources that will be instrumental to restart the European economy.

On another hand, the European Commission is promoting "open science" as a key philosophy for its research strategy.¹⁰ The "open" approach is seen as a potential boost for research and development in Europe but could conflict with its vision of technological sovereignty since scientific and data findings are open source and accessible

¹⁰ European Commission website: *Open Science*, <https://ec.europa.eu/research/openscience>.

to all, even outside Europe. This is an important issue which will require further fine tuning.

The COVID-19 pandemic has emerged as the most consequential global disruption since World War II. It calls for enhanced capabilities in technological policy from the Union, reinforcing its resilience. Increased assistance and efficiency are needed to provide help to struggling EU member states facing the difficult task of maintaining coherence of their societies through the crisis.

Finally, a reshuffled EU tech policy could be a political opportunity to respond to a newfound need for greater sovereignty but at a EU rather than member state level, thus demonstrating that the Union is ready and able to provide protection to EU citizens and member states.

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