

Competing for Tech Leadership

The Stakes

Technology is already a key element in competition between China and the “West” and will be in the future (see Figure 2). The Covid-19 crisis has catalyzed China’s push for global tech leadership. Beijing’s goal is to rapidly adopt digital and emerging technologies and integrate them with traditional industries to boost China’s future competitiveness. In doing so, Beijing aims to reduce its reliance on foreign technology. Tensions between China and the US, Canada, and Europe have accelerated this trend. The new five-year plan (2021-2026) places a strong emphasis on indigenous technological innovation.²⁴

As China’s tech clout grows, transatlantic relations become even more crucial: together North America and Europe could form the politically, economically, and technologically powerful transatlantic core of what should become flexible tech coalitions of like-minded countries that can push back against China’s authoritarian approach. To this end, more transatlantic alignment around technology policy vis-à-vis China is needed.



“You see the possibility for alignment [between the US and the EU...] I would really hope that as democracies we could agree on some of the fundamentals when it comes to standards-setting.”²⁵

Margrethe Vestager, European Commission Executive Vice President for a Europe Fit for the Digital Age, *The Wall Street Journal*, June 17, 2021

The State of Play

In recent years, the US and the EU have diverged on tech issues: for example, a tough American approach to Chinese 5G network technology has compared to an uneven European stance on the issue, with different countries pursuing different strategies to mitigate risks. Europe is also hesitant about decoupling its tech supply chains from China. Rather, many European countries prefer to chart a putative “middle course” between the two technological power blocs.

In large part due to global expansion of Chinese tech firms, which are ever more deeply embedded in an authoritarian political system and, as a result, often implicated in the use of technology for surveillance purposes, transatlantic views are now converging with regard to the downsides of reliance on Chinese technology. Some initial proposals have been made: a new EU-US Trade and Technology Council has been created, and the Biden administration is considering convening a techno-democratic alliance.²⁷ Still, differences between the EU and the US on tech policy priorities remain.

Transatlantic partners also need to spell out the specifics of their shared understanding of values related to some fundamental matters of tech governance, such as the right to privacy, instead of implicitly assuming a similar understanding on the other side of the Atlantic. Transatlantic cooperation to address China's growing push for leadership in technology can only succeed on the basis of a clearly defined agenda.



“We must build every possible technological sharing path between our key alliances. [...] I’d like to see a national list of key technology platforms that we collectively agree must emerge using Western values and must be the ones being used by our partners.”²⁶

Eric Schmidt, Chairman of the US National Security Commission on Artificial Intelligence, Senate Armed Services Committee hearing, February 23, 2021

The Priorities

Transatlantic partners should pursue the below concrete steps together over the next six to 18 months to lay the groundwork for effective cooperation on tech issues.

Setting tech standards together

Europe, the US, and Canada must make greater strides towards promoting joint technology standards, such as in 5G and 6G or artificial intelligence (AI). Beijing sees international bodies as an opportunity to promote Chinese technologies and make them the global standard (see, for example, China’s Standards 2035 policy) and intervenes politically and economically to boost China’s national champions. In contrast, transatlantic partners prefer a more hands-off approach, relying on private corporations to participate in de facto tech standard setting as well as in relevant standard setting bodies, and they assume that a given technology will be judged on its merits.

The US, Canada and Europe must develop a better joint understanding of the geopolitical implications of setting technical standards and avoid a scenario whereby they are divided on standard-setting processes and outcomes themselves. Even without resorting to Chinese tactics, transatlantic partners should share information with each other and with their own companies (1) to help Western companies understand how China attempts to influence global standard setting (2) to assess risk and support the formation of private coalitions, and (3) to ensure there are sufficient funds for knowledgeable Western experts to attend important standards-setting meetings.²⁸

Fleshing out and coordinating rules for the technology sector

A key priority should be coordinating export controls on key technologies, such as semiconductors (see Figure 4), as these present a high leverage opportunity for capping Chinese capabilities and blunting illiberal uses of technology.

Additionally, the US and the EU should finalize the shared rules they are negotiating to create an enabling environment for US-EU data flows. This will stimulate trade between transatlantic partners and give them maximum leverage to shape global rules. They should also agree on a set of tailored restrictions on technology exports to China as well as foreign direct investment into their technology sectors by Chinese firms.

Aligning principles on artificial intelligence governance and ethics

The EU is working on a pan-EU framework to set risk-based rules for the use of AI and basic privacy measures to be built into algorithms. The EU envisages a Transatlantic AI Agreement setting “a blueprint for regional and global standards aligned with our values.”²⁹ Meanwhile, some US cities and states have already moved to ban the use of specific applications of artificial intelligence, such as facial recognition. These different initiatives should lead to transatlantic coordination and alignment on some high-level principles. NATO should support efforts toward transatlantic cooperation on AI, particularly when it comes to security implications for the alliance.

Developing a shared approach to managing the human rights implications of technology

Developing countries are an increasingly important arena in which the tech competition between the West and China are highly visible. Chinese investments in information technology infrastructure or offerings of inexpensive products may come at a high price for security and human rights. The gathering of data and use of surveillance systems all have human rights implications. Transatlantic partners need to outline a shared understanding of how to ensure human rights protections in the application and development of technologies as well as how to effectively compete with China’s technology offerings in developing countries.

Promoting jointly funded research and development in foundational and emerging technologies

There needs to be a resurgence in pooling resources between liberal democracies with developed tech sectors for R&D in critical technologies, including quantum computing, synthetic biology, the latest semiconductors, or AI. To this end, the US Senate recently passed the United States Innovation and Competition Act of 2021 (USICA), which authorizes 110 billion US dollars in

spending on federal government R&D and affiliated efforts. The EU, meanwhile, has recently made available more than 100 billion euros for investments into digitization including research, which comes on top of spending by the member states. The US, Canada, and the EU should seek opportunities to support joint research projects between the US, private sector companies, and partner countries.

Developing joint guidelines to protect basic science research at universities

The US and the EU have long benefited from open exchange of ideas in the scientific and academic community. It is important to preserve an open, ethical, and integrated global knowledge system. However, some Chinese actors have in recent years taken advantage of Western openness. Instead of closing universities to Chinese or other international researchers, the US, Canada, and Europe should create tailored – and uniform – risk management measures to address current and future security threats. In most cases, this merely requires transatlantic partners to enforce existing guidelines for conflict of interest and openness about funding sources, as well as to deepen training for researchers and students about what activities are inappropriate and how to apply existing rules. A dialogue on these issues should bring together senior representatives of leading research universities in the US, Canada, and Europe to develop basic principles.