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Mission Impossible? The EU's Search for an Independent Tech Policy Amid US-China Decoupling

Europe has become the battleground for the tech war between the United States and China. It started off with China's ambitious Made in China 2025 programme in 2015, perceived by the US as a threat to its technological leadership and global military dominance. Over the last ten years, US governments have tried to restrict China's further rise as an economic and technological power with a series of containment measures. During the first presidency of Donald Trump (2017-2021), China hawks became the drivers of US-China relations. They will have a stronger position in Trump's second term (2025-2029). They are now not only increasing tariffs and tech restrictions but aiming at complete decoupling. Without the participation of its allies in massive cutoffs from China, the US decoupling strategy will not be successful. Among US allies, member countries of the European Union play a crucial role. The EU single market offers huge marketing potential for US products and services.

In Europe, the geopolitical conflict between the US and China, with its strong focus on tech supremacy, triggered a discussion about how European countries could remain competitive and whether more tech sovereignty is needed. Due to Europe's high dependency on US technology and military security, the setting up of a regulatory environment that protects European values and improves industrial competitiveness might present a challenge for EU policymakers. Moreover, given the close economic and tech cooperation of many EU member countries with China, it is questionable whether they are willing to join an anti-tech alliance with the US against China and replace their current de-risking policy with complete decoupling.

This paper starts with a discussion of the differences between the EU and the US with respect to values and strategic interests. It then studies the EU's position in future technologies and the need for stronger competitiveness, followed by an analysis of the EU's quest for tech sovereignty and the reaction of the US. Finally, it covers the context of US-China decoupling.

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EU-US divides over values and strategic interests

With Trump's return in 2025 and his America First agenda, US-Europe divides over values and strategy have resurfaced. Leblond and Vannier (2024) point to major differences in three critical policy areas: defence and security, climate change, and trade and technology. To address the last of these, the EU-US Trade and Technology Council (TTC) was founded in 2021. It focused on five key fields of cooperation: export controls, foreign direct investment screening, secure supply chains (especially regarding semiconductors), technology standards, and cooperation on artificial intelligence (AI) and global trade challenges. Ten working groups were set up on the following topics: technology standards cooperation, climate and clean tech, secure supply chains, ICT security and competitiveness, data governance and technology platforms, misuse of technology threatening security and human rights, export controls cooperation, investment screening cooperation, promoting SME access to and use of digital technologies, and global trade challenges.[1]

The TTC was supposed to improve bilateral cooperation. Although it was the EU that took the initiative, both sides were motivated to team up with a long-term focus of promoting joint standards around emerging technologies to better meet the challenges of China's rise as a tech power. Following Scott and Barigazzi (2021), from the perspective of the US, the TTC was primarily an instrument for pushing back against China through transatlantic cooperation in the field of trade and technology standards. The comment by former White House national security adviser Jake Sullivan regarding the US's motivation confirms this view, emphasising that the TTC "will focus on aligning our approaches to trade and technology so that democracies and not anyone else, not China or other autocracies, are writing the rules for trade and technology for the 21st century" (Scott & Barigazzi, 2021).

Between 2021 and 2024, six ministerial TTC meetings were held, chaired by high level EU and US officials. In

1 https://commission.europa.eu/about/organisation/college-commissioners/henna-virkkunen_en

addition, the TTC's working groups served as channels of communication and diplomacy on a regular basis. Although the factsheet of the TTC's performance since 2021 shows an impressive list of bilateral activities and achievements (European Commission, 2024b), critics perceive a mixed record. The deterioration of the international political environment triggered by the impact of the COVID-19 pandemic and the Russian invasion of Ukraine led to a strong focus on security and resilience. Domestically, for example, changes in climate policy in both the EU and the US impeded the implementation of transatlantic green trade policy measures. That the TTC's ambitious goals were not met is also ascribed to the broad scope of topics and the inadequate organisational structure that failed to sufficiently engage stakeholders (Belton & Gruening, 2025).

Whether the TTC will continue its work under the Trump presidency remains unclear given recent US policy decisions on AI governance, deregulation and tariffs. An example of the latest policy measure on AI is Donald Trump's executive order (EO) on Removing Barriers to American Leadership in Artificial Intelligence published on 23 January 2025 (The White House, 2025), which replaced the EO of former president Biden of 30 October 2023, entitled Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (The White House, 2023). Comparing the two policy documents, critics see a significant shift away from the Biden Administration's focus on oversight, risk mitigation and equity in favour of deregulation and support for AI innovation that should enable the US to maintain its global dominance. The Trump Administration's new deregulatory policy on AI governance contrasts sharply with the precautionary approach pursued by the EU. The EU's Artificial Intelligence Act of 2024 (EUAIACT) stresses safety, transparency, accountability and ethics. In principle, US companies that do not comply with EUAIACT standards will not have access to the European market (Carrillo et al., 2025).

At the AI Action Summit in Paris in February 2025, US Vice President JD Vance criticised that US business could not compete on the European market because of the restrictive regulatory framework for AI. He warned that "America cannot and will not accept" foreign governments "tightening the screws" on US tech companies (The American Presidency Project, 2025). At the summit, 62 countries and the EU signed a voluntary commitment to developing and making AI "open, inclusive, transparent, ethical, safe, secure and trustworthy" (Elysee, 2025). The US and the United Kingdom did not sign the document (Birchard, 2025). The president of the European Commission, Ursula von der Leyen, used the AI Action Summit in Paris to announce that the EU plans – after establishing a secure legal framework for AI – to support the commercial development of AI with increased funding over the coming years to catch up with the US and China (Birchard, 2025).

The EU has, however, fallen behind the US not just in AI but in most future technologies. This is one of the conclusions Mario Draghi, former president of the European Central Bank and Italian prime minister, presented in his report on The Future of European Competitiveness to the European Parliament in September 2024. The following section presents findings from various databases that show Europe's weakness in advanced and future technologies, underlining the urgent need for a new industrial strategy in Europe.

The EU's weak position in future technologies

Although Europe has several leading countries in science and technology, the EU has fallen behind the US and, in some fields of science and technology, behind China. According to data on innovation in 133 countries, the World Intellectual Property Organisation (WIPO) shows that five countries (Sweden, Finland, the Netherlands, Germany and Denmark) out of the EU27 belong to the top ten global leaders in the 2024 innovation index. The non-EU member countries Switzerland and the UK, rank first and fifth, respectively, among the top ten. The Global Innovation Index (GII) captures performance across four key stages of the innovation cycle – investment in science and innovation, technological progress, technological adoption and socioeconomic impact of innovation (WIPO, 2024).

The findings of the European Innovation Scoreboard (EIS) confirm the major challenges the EU is facing on science and technology development. In 2023, only 12 EU countries' performance in the digitalisation dimension was above average, while 15 countries performed below average, including Germany. From 2017 to 2024, the EIS recorded a decline in the EU's intellectual assets as a share of international patent and design applications. Compared to the EU's global competitors, the EIS found lower investment in research and innovation (R&I), especially by the private sector, in the EU (European Commission, 2024a).

When it comes to emerging technologies, the report on Weak Signals in Science and Technology 2024 finds that the US and China are the leaders in producing scientific knowledge across most clusters of twelve emerging technologies. The EU plays a strong role in research and related scientific publications for some of the twelve emerging technologies, namely, digital twins, AI and machine learning, therapeutics and biotechnologies, energy and environment, and agriculture. China and the US are

leading in patenting for all twelve categories of emerging technologies, which include advanced materials and advanced manufacturing, aerospace, mobility and transport, information and communication technologies, medical imaging, and quantum cryptography. The report also noted that the European research and development (R&D) ecosystem appears fragmented, with many strong but small-sized actors lacking critical mass. While China's R&D ecosystem exhibits specialisation across most of the twelve clusters of emerging technologies, the European ecosystem is assessed as focusing only on AI and machine learning (Eulaerts, 2025).

Against the background of the EU's weak position in emerging technologies and resulting low productivity, the Draghi report defines major areas for action. Out of this comprehensive study covering two volumes, only some points can be addressed in this contribution. The report represents a diagnosis of where Europe stands and recommendations for policymaking focusing on three policy actions. First, Europe needs to close the innovation gap with the US and China on advanced technologies. The Draghi report points to the problem that EU companies are mostly specialised in mature technologies that offer less opportunity for breakthroughs and spend less on R&I compared to US companies. To unlock their innovative potential, companies should not only invest more but also integrate AI into existing industries. Other challenges relate to inconsistent and restrictive EU regulations that hinder innovative companies from scaling up in Europe. Second, the Draghi report suggests a joint plan for decarbonisation and competitiveness given the interdependence of energy prices and the ability to compete internationally. Therefore, energy prices should be reduced and made less volatile. While decarbonisation offers commercial opportunities, EU companies face strong Chinese competition. Taking the various clean technologies into account, the report recommends a differentiated approach according to sectors and technologies. Third, the report sees a need to increase security and reduce dependencies. This action centres on secure supply chains of critical raw materials and technologies, as well as on developing the EU's defence capability. To better coordinate national policies among the EU member countries, the report advises introducing a factual EU foreign economic policy based on European values that considers the situations of middle- and low-income member countries (Draghi, 2024).

The Draghi report offers a wide range of in-depth analysis and recommendations that are designed to bring about the necessary changes to the EU. One of the underlying principles in the report is the quest for tech sovereignty, which is mentioned explicitly a few times. Although the EU faces a competitive disadvantage in some digital sectors, the report emphasises, for example, that "it is important that EU companies maintain a foothold in areas where technological sovereignty is required, such as security and encryption ('sovereign cloud' solutions)" (Draghi, 2024, p. 24). While the report acknowledges the dominance of US cloud providers, it states that "the EU must find a middle way between promoting its domestic cloud industry and ensuring access to the technologies it needs" (Draghi, 2024, p. 34). Everett et al. (2024) point to the report's suggestions of several regulatory initiatives that should bring about sovereignty objectives, especially for critical technologies. These include a new EU cloud and AI development act, better interplay between the General Data Protection Regulation (GDPR) and the AI Act, as well as recommendations around digital networks. It is not surprising that the discussion on EU tech sovereignty receives criticism from the US.

The EU's quest for tech sovereignty

The composition of the new European Commission demonstrates that the Draghi report's recommendations are being taken seriously. For the first time in the history of the EU, one of the six vice presidents in the European Commission has been tasked with responsibility for tech sovereignty together with security and democracy, as well as for the digital and frontier technologies portfolio (European Commission, 2024c). Over the next five years, Henna Virkkunen has to work through a long list of topics that have a direct impact on the EU's tech sovereignty, for example, development of an Apply AI Strategy that improves industrial uses and public services, development of an EU Cloud and AI Development Act together with an EU-wide cloud policy and a long-term EU quantum chips plan, and presenting a European Data Union Strategy.

Critics often equate tech sovereignty with protectionism. The way the Draghi report and the European Commission are embedding this principle into the overall industrial policy, however, works like a frame for innovation policy. In their paper on tech sovereignty as additional rationale for innovation policy, Edler et al. (2023) argue that "technology sovereignty should be conceived as state-level agency within the international system, i.e. as sovereignty of governmental action". The authors define tech sovereignty "not as an end in itself, but as a means to achieving the central objectives of innovation policy – sustaining national competitiveness and building capacities for transformative policies". For Edler et al. (2020), tech sovereignty encompasses "the ability of a state or a federation of states to provide the technologies it deems critical for its welfare, competitiveness, and ability to act, and to be able to develop these or source them from other economic ar-

eas without one-sided structural dependency". In sum, the main characteristic of tech sovereignty following Edler et al. is the ability of governments to act independently in the global tech system, not following an isolationist policy but cooperating with robust and reliable national, regional and international networks.

Comments by Foss (2025) from Think Tank Europa follow a similar line of argument, stressing that "a majority of planned tech initiatives focus on enabling innovation by building digital infrastructure". He expects that the Data Union Strategy, for example, will help the EU leverage high-quality data as a source of competitiveness. The Digital Network Act, too, will have the potential to improve connectivity and bring the EU closer to achieving its Digital Decade goals.

Building a EuroStack as a core technology infrastructure for Europe which covers semiconductors, networks, AI, cloud computing, the Internet of Things, data platforms and digital ID, is another concept discussed to increase the EU's digital sovereignty. According to the authors of the study "EuroStack – A European Alternative for Digital Sovereignty" (Bria et al., 2025), this initiative presents an ambitious vision for Europe's digital future, overcoming the bloc's heavy reliance on external technologies. Currently, more than 80% of Europe's digital infrastructure and technologies are imported and about 70% of foundational AI models are developed in the US (Borak, 2025; Bria et al., 2025).

The EU's focus on tech sovereignty is criticised by various experts and organisations in the US, such as the Information Technology and Innovation Foundation (ITIF), a think tank supported by many US tech companies, and increasingly from big tech companies directly (Meyers, 2025). Robert Atkinson, president of the ITIF, for example, argues that the EU's discriminatory regulations have led to a loss of revenue for US industries. He complained that "[i]n its bid for tech sovereignty, the EU has been aggressively targeting U.S. firms and industries, with unfair protectionist policies" (Atkinson, 2024). As counter measures, Atkinson suggests updating Section 301 of the Trade Act to address digital trade, using ICT service reviews against European companies, imposing taxes to offset the EU's digital service taxes and limiting US data flows to the EU. As defensive measures, he recommends, for example, limiting EU access to federal procurement opportunities, investigating critical exports and excluding European firms from the US defence industrial base. Although Atkinson's policy recommendations seem to be excessive, they demonstrate the range of potential sanctions the US government can apply against EU companies.

US anti-China tech alliance – What is Europe's role?

With Trump's sweeping tariffs on EU imports in March 2025 and his threat to escalate a global trade war with further tariffs on European goods, the US-EU bilateral economic relationship reached its lowest point. That Trump would withdraw from the World Health Organization and the Paris Climate Agreement once back in office had been expected by many observers in the EU. His bullish policies vis-à-vis Europe, other US NATO allies and Ukraine, however, came as a shock. It signaled to US allies that they can no longer rely on the US. Moreover, according to Steve Tsang (2025), Trump's foreign policy is also strengthening China's argument that the US "will use the liberal international order to put America first", establishing an order that is unfit for the twenty-first century and needs to be changed.

US policy on China under Trump 2.0 is expected to be even more aggressive than that of his first term, but also more transactional and less predictable (China Briefing, 2025). In The President's 2025 Trade Policy Agenda, China is addressed as "the single biggest source of our country's large and persistent trade deficit and a unique economic challenge" (United States Trade Representative [USTR], 2025). This document refers to the trade agreement Trump negotiated with China in his first term (Phase One Agreement) and announces that the USTR will assess China's compliance with this agreement, focusing on technology transfer, intellectual property and innovation, and other unfair practices. The assessment will also be used for discussion in the US Congress on China's Permanent Normal Trade Relation (PNTR) status.

The revocation of China's "most favored nation" status, followed by the phasing out of the import of essential goods, were listed as the first steps in decoupling from China in the Republican Party's 2024 platform. With the ambitious aim to "build the greatest economy in history", the platform also listed blocking Chinese investment in US real estate and industry, and encouraging US companies to leave China and bring critical supply chains back to the US. Additional goals include saving the US auto industry, the Buy American and Hire American concepts, and restoring the American Manufacturing Superpower (Kwan, 2025).

Given the growing frictions across the Atlantic over trade and technology on the one hand and the US decoupling approach vis-à-vis China on the other, Europe has little incentive to follow Trump's China policy. In contrast, a more pragmatic relationship with China offers not only better market conditions for European companies but also cooperation in areas of global importance such as

climate change and AI governance. China's rise as a science and technology power is one of the most important developments, contributing to the worldwide increase of knowledge (Xie et al., 2014). International data show that China has made tremendous progress in some specific fields of science and technology, making the country an attractive partner for the EU in future technologies. However, the relationship between the EU and China should be better balanced and Europe might be better off continuing its de-risking policy towards China, reducing overdependency on some Chinese imports, protecting the EU against unfair competition from China and strengthening Europe's technological and industrial capacities.

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