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## **#31 Reverse Dependency: Making Europe's Digital Technological Strengths Indispensable to China**

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### **Key Takeaways**

- In adapting to growing geopolitical competition over digital technology, the EU and the UK are striving for economic security and technological sovereignty.
- European policies focus on reducing critical over-dependencies on China. This de-risking is a necessary process of adaptation to the new geopolitical realities.
- Europe's greatest source of strength is research and innovation, but intellectual property and production contribute too.
- Technological superiority, as well as commercial, political and regulatory aspects, are all decisive factors in European technological indispensability.
- Europe should calibrate its levels of ambition by technology.
- Not every European technological strength carries the same degree of political leverage.
- Integrate strategic and commercial considerations for a durable technology policy.
- Balance strategic entanglement and autonomy as two elements of achieving European security.
- Policy recommendations for Europe are technology-specific and vary according to the level of ambition, from research promotion to knowledge security and commercialization.

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## **Executive Summary**

This report analyses reverse dependencies of the People's Republic of China (PRC) on the European Union (EU) and the United Kingdom (UK) across 12 case studies in digital technologies. It situates the analysis in a context of growing geopolitical competition, in which the EU and the UK seek to strengthen economic security and technological sovereignty while reducing dependencies on China. At the same time, the report stresses that it is virtually impossible to reduce strategic dependencies to a level that guarantees full autonomy, as technological ecosystems are characterised by a highly transnational division of labour and persistent interdependence.

Against this background, the report explores how Europe can maintain reverse dependencies and remain technologically indispensable to China. Maintaining such dependencies can create economic and technological costs for China, thereby shaping the considerations of Chinese leadership, particularly where economic growth remains a central priority. The report therefore positions reverse dependency as a complement to de-risking strategies.

The analysis identifies Europe's strengths across several dimensions, including research and innovation, intellectual property and patents, and production and commercialisation. In many cases, Europe's position results from a combination of these dimensions, rather than a single source of advantage. At the same time, the report emphasises that technological superiority alone is insufficient, as the translation of technological strength into leverage depends on market position, regulatory frameworks, and broader political conditions.

Across the case studies, the report finds that only a limited number of technologies constitute clear chokepoints, while in most cases Europe's leverage remains partial and context-dependent. The degree of reverse dependency varies according to factors such as substitutability, global competition, and spillovers, and not all technological strengths can be readily mobilised for strategic purposes.

The report further highlights that maintaining reverse dependencies depends on commercial actors and innovation ecosystems, which underpin Europe's technological strengths. This underscores the importance of aligning strategic objectives with commercial realities, as Europe's position in global value chains remains shaped by interdependence rather than autonomy.