

Europe's Tech Sovereignty Needs Standards to Scale

CEN and CENELEC welcome the [EU Tech Sovereignty Package](#) published by the European Commission on 3 June. In particular, we recognize its emphasis on Europe's capacity to develop, deploy, and scale trusted digital technologies and infrastructure, while taking a leading role in international standardization.

The Package defines technological sovereignty as the capacity to control, switch, and scale critical technologies. Standardization is central to these objectives. European standards provide the common technical foundation needed to support interoperability, reduce vendor lock-in and switching costs, and foster trusted cooperation across ecosystems. They also help translate European values and policy priorities, such as cybersecurity, data governance, and openness, directly into the technical architecture of products and services.

Against this background, the following sections outline how European standards can support the main elements of the Package and contribute to its effective implementation.

Open-Source Strategy

The Open-Source Strategy emphasizes the need to strengthen the links between open source and standardization, notably through the revision of Regulation (EU) No 1025/2012. It proposes integrating open-source communities more systematically into standards development, improving how standards are implemented in open source, and supporting these efforts through dedicated funding instruments such as business accelerators. CEN and CENELEC strongly support this direction, seeing it as an important step towards future-proofing the European Standardization System (ESS) and ensuring it remains responsive to the evolving needs of the Single Market.

Open-source communities already make significant contributions to standardization in the digital domain, such as in support of initiatives including the Cyber Resilience Act and the Digital Product Passport. Ensuring and strengthening the effective participation of the open-source community is therefore a key priority. To facilitate this, CEN and CENELEC are setting the foundation for initiatives such as the European Standardization Hub: the aim is to provide structured pathways for open-source communities to engage with the European standardization framework, including mechanisms to assess and incorporate technical materials developed outside ESS processes while maintaining core principles like openness, transparency, inclusiveness, and consensus.

Additional measures outlined in the strategy, such as the proposed European Digital Public Infrastructure Steward Organization, aim to ensure that open-source actors have the resources needed to contribute effectively to standardization activities. This would help strengthen the long-term sustainability of open-source projects that support Europe's digital sovereignty objectives. CEN and CENELEC, together with our Members, are working to connect these initiatives more closely with the European Standardization System in practice. This includes creating structured pathways for open-source communities to contribute technical expertise, engage in relevant standardization activities, and support the development of interoperable, trusted, and market-relevant solutions.

Cloud and AI Development Act

Together with the Open-Source Strategy, the Cloud and AI Development Act also refers to “open standards” and “open specifications” as tools to promote interoperable technologies, encourage their use in public administrations, and strengthen their role in public procurement.

CEN and CENELEC support this objective, as open and interoperable technical solutions are essential to avoid fragmentation, reduce dependency on single providers, and support Europe’s digital sovereignty. However, the terms “open standards” and “open specifications” should be clearly defined to avoid ambiguity in implementation and ensure consistency.

In this context, it is important to make full use of the range of deliverables developed by CEN and CENELEC. Alongside European Standards, which form the basis for harmonized standards (hENs), CEN and CENELEC also develop a range of complementary deliverables with different levels of maturity and development timelines. These can provide practical and timely support for emerging technologies, while remaining anchored in established ESO processes and the core principles of the ESS: openness, transparency, inclusiveness, and consensus. Preserving these principles in European standardization is essential to ensure European technological sovereignty.

Chips Act 2

The Chips Act established a comprehensive EU framework to strengthen Europe’s semiconductor ecosystem, enhance resilience, and improve security of supply. Since then, semiconductors have become even more central to Europe’s economic stability, technological sovereignty, and security, while global demand continues to grow rapidly.

CEN and CENELEC support the objectives of the proposed Chips Act 2, particularly its focus on scaling innovation to industrial deployment, reinforcing resilience, and safeguarding the effective functioning of the internal market.

Standards will be essential to achieving these goals. They provide a common technical foundation across the Single Market, support consistency between national approaches, and offer practical pathways for compliance with EU legislation. This is particularly important for industry, including SMEs, as standards can help reduce costs, administrative burdens, and fragmentation.

CEN and CENELEC are already contributing to this agenda through standardization work relevant to the semiconductor value chain. In particular, CENELEC TC 47X ‘Cybersecurity and Data Protection’ is a key provider of cybersecurity-related standards for semiconductor devices, microelectronics, and embedded systems, helping to strengthen security, privacy, and resilience against cyber-attacks.

As the Chips Act 2 is developed, it should make full use of the public-private partnership and harness existing standards and ongoing work within CEN and CENELEC. Embedding standardization from the outset will help establish a coherent Union framework, prevent

obstacles to the functioning of the internal market, reduce compliance burdens for industry, and support a consistent response to supply chain risks.

Strategic Roadmap for Digitalization and AI in the Energy Sector

CEN and CENELEC welcome the Strategic Roadmap for Digitalization and AI in the Energy Sector, which highlights the need to accelerate the uptake of digital and AI solutions while ensuring a secure, resilient and efficient energy system. Ongoing work within CEN and CENELEC technical committees on data, AI, cybersecurity, smart grids, and energy efficiency can make a concrete contribution to achieving these objectives.

Standards can support the sustainable integration of data centres into the energy system, enable secure and efficient cross-border data sharing, accelerate the uptake of digital and AI solutions, and provide the interoperability needed to connect digital solutions across Europe's energy infrastructure. Harnessing standards in these fields will be essential to deliver a resilient, innovative, and interconnected European energy system.

Conclusion

As highlighted in [Mario Draghi's report on the future of European competitiveness](#), strengthening Europe's technological, industrial and economic sovereignty will require closer coordination between regulatory, industrial and standardization policies. European standards provide a concrete and operational means to translate these strategic objectives into market-relevant practices, supporting interoperability, trust, scalability and competitiveness.

In this context, CEN and CENELEC stand ready to work with the European institutions, industry, and stakeholders on the implementation of the EU Tech Sovereignty Package. Embedding standardization from the outset as a core pillar of governance and ensuring close coordination will be essential to ensure that Europe's digital sovereignty is delivered in a coherent, inclusive, and market-driven way.

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