

InDiCo-Global Factsheet

The European Standardisation System (ESS)

Europe's Strategic Infrastructure for Digital and Industrial Markets

A System Supporting Europe's Regulatory Power — And Why It Matters Globally

European standards are not technical afterthoughts. They form part of the operational layer of EU legislation.

When the European Union adopts rules on key topics such as cybersecurity, AI, sustainability, or digital infrastructure, the European Standardisation System (ESS) translates political objectives into technical specifications that industry can implement.

For partners within the EU and beyond, this means:



Standards shape and provide market access.



Standards support interoperability.



Standards influence global value chains.

Engaging with the ESS is therefore not optional for economic players looking to address the EU market — it is strategic.

Why It Matters for Industry & Exporters in Partner Regions

The EU is one of the world's largest markets. European standards cited in the Official Journal of the EU frequently provide presumption of conformity with EU legislation.

This means:



Products aligned with cited European Standards do not need to demonstrate compliance.



Alignment reduces regulatory uncertainty and sets predictable IPR context.



Early engagement reduces time from product development to market deployment.

In fast-moving digital sectors, like AI, cybersecurity, data governance, and smart infrastructure, standards increasingly shape who can participate in trusted ecosystems.



Why It Matters for Regulators & Standards Bodies



The ESS operates through a public-private partnership model linking:

- European Commission and EU Member States
- 3 European Standards Organizations and their membership
- 30+ National Standardization Bodies and their membership
- Representatives of SMEs, Consumers, Workers, and Environmental interests



For regulators and standards bodies outside Europe, cooperation with the ESS enables:

- Regulatory interoperability
- Reduced technical trade barriers
- Structured dialogue on standardisation best practices
- Alignment with globally recognised standards

Fragmentation increases costs. Alignment strengthens competitiveness.

What Is the European Standardisation System?

European Standards are developed by:



CEN
(European Committee
for Standardization)



CENELEC
(European Committee
for Electrotechnical
Standardization)



ETSI
(European
Telecommunications
Standards Institute)



While most standards are developed upon industry and market requests, under Regulation (EU) 1025/2012, the European Commission can issue Standardisation Requests to these organizations to develop standards supporting EU legislation (=harmonised standards).

These standards:

Translate legal requirements into
technical specifications

Enable market access

Provide legal certainty

Support innovation

The ESS is therefore a strategic implementation mechanism for EU policy.

ESS and the Digital Transition

Digital policy is increasingly standards-driven.

ETSI, CEN and CENELEC contribute to digital standardisation in areas such as:

-  5G/6G
-  Artificial Intelligence
-  Cybersecurity
-  Data
-  Quantum
-  Digital Public Infrastructure
-  Internet of Things
-  Digital Product Passport
-  Smart Grids

European work is closely coordinated with ISO, IEC, and ITU to avoid duplication and ensure global compatibility.

Digital markets depend on interoperable standards.



Interoperability depends on cooperation.



Global Coordination: Europe Does Not Act Alone

The European Standardization Organizations all have a broad network of partners worldwide, through dedicated partnership and membership agreements. Notably, a strong link exists between CEN and ISO (Vienna Agreement) and between CENELEC and IEC (Frankfurt Agreement)

This ensures:



International alignment



Reduced duplication



Stronger global acceptance

Engagement with the ESS therefore often means engagement with international standardisation processes — and vice versa!

How InDiCo-Global Supports Your Engagement



InDiCo-Global is a Horizon Europe Coordination and Support Action that strengthens cooperation between Europe and partner regions on digital policy and standardisation.

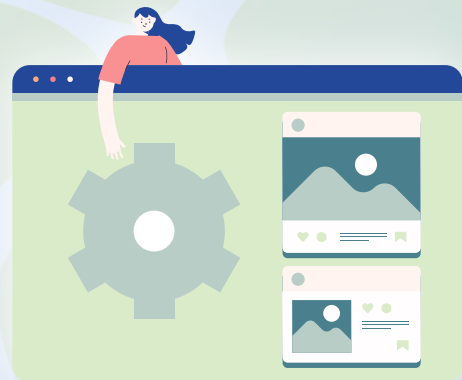
The project facilitates:

- Policy dialogues
- Expert exchanges
- Technical workshops
- Mapping of standardisation priorities
- Structured engagement between European Technical Committees and international stakeholders

The objective is not regulatory export. It is interoperability, transparency, and shared digital infrastructure.

Visit the InDiCo-Global website to learn more about upcoming activities related to education and contact the project team to discuss a possible involvement.

<https://indico-global.eu/>



For more specific information on standardization and education mail us at info@indico-global.eu

