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Position Paper

The Framework Programme 10 and European Standardization

Background Information

CEN and CENELEC, two of the official European Standardization Organizations, aim to strengthen the role of standardization in the EU's innovation framework under the upcoming Framework Programme 10 (FP10). Effective standardization helps translating research and innovation (R&I) investments into market-ready solutions, essential for Europe's global competitiveness and strategic autonomy.

To enhance the European Standardization System's (ESS) contribution to FP10, this paper proposes three **Key Strategic Initiatives**:

- 1. **Enhanced Integration of Standardization in Research Projects**: Promote a coherent European Standardization System, as defined in Regulation EU 1025/2012, by embedding standardization across all stages of R&I activities.
- 2. **Support Mechanisms for Skills Development in Standardization**: Enhance support and training environment to integrate standardization in R&I projects, enabling greater alignment with EU strategic goals for FP10 beneficiaries.
- 3. **Targeted Incentives and Resources for Standardization Activities**: Enhance support for projects advancing standardization by targeting finances, sustainability, and capacities.

These initiatives draw lessons from Horizon Europe and align with EU policies, including the *EU Strategy on Standardisation* and the *Code of Practice on Standardisation*. By implementing these measures, FP10 can better catalyse innovation, ensure global leadership in new technologies, and maximize the societal and economic value of EU-funded research.



Introduction

2024 has seen several reports highlighting challenges to **Europe's innovation ecosystem and global competitiveness**, especially in translating R&I investments into societal and economic value compared to other global regions, as highlighted by **Mr Draghi** (2024) and **Mr Letta** (2024). The **Heitor Report** (Commission Expert Group on the Interim Evaluation of Horizon Europe, 2024) offers concrete recommendations for the Framework Programme 10 (FP10) and highlights the need to devise and fund a strategy to advance the EU as global standards setter. Although Europe's R&I sector has strong capabilities, its potential is underutilized due to insufficient market integration shown, among other indicators, by lacking participation in standardization processes. This is highlighted in different policies, such as the **`EU Strategy on Standardisation'** (European Commission, 2022), the **`Guiding Principles for Knowledge Valorisation'** (European Council, 2022), as well as the **`Code of Practice on Standardisation in the European Research Area'** (European Commission, 2023).

R&I outcomes need to be linked to standardization efforts to foster European leadership in new technologies and their applications. Horizon Europe is making steps in promoting information and tools about standardization. However, **the impact by Horizon Europe's standardization-related activities is moderate**. Major gaps must be covered in an integrated, strategic manner by FP10 if Europe wants to unleash the potential of publicly funded R&I activities.

To support closing the innovation gap, aligned with the **Competitiveness Compass** (European Commission, 2025), the upcoming **Framework Programme 10 should be a cornerstone to the competitiveness of the European economy.** FP10 needs to improve ways to turn research and its results into innovative products and services. Standards developed by CEN and CENELEC and their National Members are enablers of knowledge sharing and exploitation.

More precisely: **Standards transform research outcomes into practical applications** in accordance with European values and EU policy objectives.

Consequently, the European Standardization System (ESS) is an essential part of the European Single Market and bolsters Europe's strategic autonomy and global competitiveness.¹

The implementation of European Standards (ENs) in and outside of Europe supports the Single Market and additionally facilitates global access to markets, supporting the WTO and EU trade agreements.² Therefore, **the central role of standardization in driving innovation, enhancing competitiveness, and ensuring impactful, market-ready solutions must be effectively implemented throughout FP10**.

¹ Blind (2022), Blind, et al. (2022), Deng, et al. (2022), Vennerød, et al. (2023), Blind (2025).

² See also the CEN and CENELEC Discussion Paper 'Call for Evidence on the Single Market Strategy': https://www.cencenelec.eu/news-and-events/news/2025/brief-news/2025-02-03-single-market-strategy/



This paper proposes **Key Strategic Initiatives** on how to bridge the gap between R&I and standardization, making standardization an integrated part of the R&I lifecycle from writing project calls to post-project knowledge valorisation:

- 1. Enhanced integration of standardization in research projects.
- 2. Support mechanisms for skills development in standardization.
- 3. Targeted incentives and resources for standardization activities.

The above initiatives draw on lessons learned under Horizon Europe (FP9). By establishing clear support structures, targeted incentives, and a stronger focus on standards as a knowledge valorisation route, FP10 can catalyse a more competitive, resilient, and innovation-driven European market. Standardization is a cornerstone of innovation and economic integration and must be positioned as such in FP10.

1. Enhanced Integration of Standardization in Research Projects

Promote a coherent European Standardization System, as defined in Regulation EU 1025/2012, by embedding standardization across all stages of R&I activities.

Standardization must be considered as an established knowledge valorisation route in all areas of FP10. Particularly Research and Innovation Actions (RIAs) and Innovation Actions (IAs) often overlook standardization due to lack of motivation and/or uncertainty about its consideration in the evaluations, limiting their impact and risking unexploited results. Additionally, Coordination and Support Actions (CSAs) may lack the involvement of the European Standardization Organizations (ESOs), their members, or Annex III organizations, creating gaps in the European Standardization System. FP10 must substantially boost the number of project calls that request the consideration of existing standards and the contribution to standardization. To achieve this and to guide public R&I activities, a more vigorous engagement of European R&I experts and networks is needed³ and should be maintained and supported via FP10. This will actively promote and facilitate participation in the development of strategic standards in areas of high policy importance for the EU.

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³ This includes Public-Private Partnerships (PPPs), including Joint Undertakings, and policy-driven stakeholder dialogues, such as the High-Level Forum, Trade and Technology Councils and Digital Partnerships, and the 'Multi-Stakeholder Platform on ICT Standardisation'.



Key Strategic Actions

- 1. Establish and integrate standardization criteria into the call preparation, initial project evaluation, funding, and reporting processes and require relevant R&I projects (IAs, RIAs, and some CSAs) to assess how outcomes could support or benefit from standardization.
- 2. Require applicants to collaborate with other projects within the area to make joint contributions to standardization.
- 3. The European Commission should implement regular monitoring mechanisms to assess the effectiveness of standardization activities by R&I projects, identify gaps, and enhance future initiatives.
- 4. Facilitate partnerships between R&I organizations and ESOs with their National Members to support standardization activities, e.g., via PPPs and stakeholder dialogues under the guidance and support of the European Commission. Relevant activities, e.g., CSAs focused on standardization aspects, must include ESOs to maintain ESS coherence.

2. Support Mechanisms for Skills Development in Standardization

Enhance support and training environment to integrate standardization in R&I projects, enabling greater alignment with EU strategic goals for FP10 beneficiaries.

R&I projects and researchers must be empowered to utilize standardization to maximize knowledge sharing and valorisation, dissemination, and market impact. Therefore, improved education on standardization⁴ and simplified means of access to information⁵ are needed. A reinforced focus on standardization will increase project effectiveness, expand market reach, and ensure alignment with EU strategic objectives.

Key Strategic Actions

 Support project consortia in developing project-specific standardization strategies, e.g., via trainings to National Contact Points (NCPs) and EC Project Officers (POs), that align with project goals and industry demands, ensuring early integration of standardization in project planning and development.

⁵ See Stand4EU (https://www.stand4eu.eu/)

⁴ See Edu4Standards: https://www.edu4standards.eu/ and the Education & Skills on Standards Pledge (High-Level Forum on European Standardisation, 2024)



- 2. Extend dedicated training programs like the HS Booster Academy⁶ to equip project applicants, researchers, and experts with skills in standardization, ensuring they can effectively contribute to standards development on European and national levels.
- 3. Strengthen and streamline Coordination and Support Actions (CSAs) with the involvement of European Standardization stakeholders as defined in Regulation 1025/2012 (i.e., ESOs, Annex III, NSBs, NCs) to ensure ongoing access to standardization expertise and resources across project duration.

3. Targeted Incentives and Resources for Standardization Activities

Enhance support for projects advancing standardization by targeting finances, sustainability, and capacities.

R&I projects and their consortium partners who contribute to standardization, e.g., ARETE, D^2EPC, INKplant, are strengthening the ESS, foster innovation, and improve market relevance. Incentivizing such contributions encourages more research and stakeholders to embed standardization efforts in their activities. Mechanisms for the continuous integration of research results into standards beyond the lifespan of individual projects are currently sporadic. Longer-term R&I projects, initiatives, or entities with the capacity and incentives to engage in standardization over extended periods could enhance the valorisation of R&I results through standardization.

Key Strategic Actions

- 1. Introduce incentives, such as necessary funding or extended timelines, for R&I projects that successfully contribute to standards or significantly advance standardization in their field.
- 2. Provide financial and technical assistance to R&I projects aiming to create lasting standardization impacts, particularly via consortium partners maintaining standardization activities after project duration, such as supporting their involvement in Technical Committees. Examples for projects are StandICT, SeeBlocks and CyberStand.⁸

⁶ See HSbooster (<u>https://hsbooster.eu/training-academy</u>) and Standards+Innovation (https://www.standardsplusinnovation.eu/)

⁷ The three projects are the respective winners of the Standards+Innovation Awards in 2022, 2023, and 2024. CEN and CENELEC annually recognise R&I projects, individual researchers/innovators and young researchers. See: https://www.cencenelec.eu/get-involved/research-and-innovation/r-i-communities-valuing-contributions/s-i-awards/

⁸ See StandICT (<u>https://www.standict.eu/</u>), SeeBlocks (<u>https://www.seeblocks.eu/</u>) and CyberStand (<u>https://cyberstand.eu/</u>)



3. Support the transition away from publication-based metrics by improving standardization related metrics in FP10 to promote recognition of academic and professional contributions to standardization by projects and individual researchers.⁹

References

Blind, K., 2022. Standards and innovation What does the research say?, Geneva: ISO R&I papers.

Blind, K., 2025. Standardization and Standards: Safeguards of Technological Sovereignty?. *Technological Forecasting and Social Change,* Volume Volume 210. Blind, K., Krieger, B. & Pellens, M., 2022. The Interplay between Product Innovation, Publishing, Patenting and Developing Standards. *Research Policy,* Volume 51(Issue 7).

Commission Expert Group on the Interim Evaluation of Horizon Europe, 2024. *Align, act, accelerate. Research, technology and innovation to boost European competitiveness.*, s.l.: European Commission.

Deng, X., Li, Q. C. & Mateut, S., 2022. Participation in Setting Technology Standards and the Implied Cost of Equity. *Research Policy*, Volume 51(Issue 5). Draghi, M., 2024. *The future of European competitiveness – A competitiveness strategy for Europe*, Brussels: European Commission.

European Commission, 2022. An EU Strategy on Standardisation. Setting global standards in support of a resilient, green and digital EU single market, Brussels: Official Journal of the European Union.

European Commission, 2023. *Code of Practice on standardisation in the European Research Area,* Brussels: Official Journal of the European Union.

European Commission, 2025. *A Competitiveness Compass for the EU,* Brussels: European Commission.

European Council, 2022. *Guiding principles for knowledge valorisation,* Brussels: Official Journal of the European Union.

High-Level Forum on European Standardisation, 2024. *Education & Skills on Standards Pledge*, Brussels: European Commission.

Letta, E., 2024. *Much more than a market – Speed, Security, Solidarity,* Brussels: European Council.

Vennerød, Ø., Skyum, L., Erraia, J. & Midtømme, K., 2023. *Macroeconomic Benefits of Standardisation: Evidence from Six Northern European Countries.*, Oslo: Menon Economics.

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⁹ CEN and CENELEC support this via various activities, e.g., STDBIBLIO (https://www.cencenelec.eu/get-involved/research-and-innovation/r-i-communities-valuing-contributions/scientific-references/).



About CEN and CENELEC

CEN (European Committee for Standardization) and CENELEC (European Committee for Electrotechnical Standardization) are recognized by the European Union (EU) and the European Free Trade Association (EFTA) as European Standardization Organizations responsible for developing standards at European level, as per European Regulation 1025/2012. The members are the National Standards Bodies (CEN) and National Electrotechnical Committees (CENELEC) from 34 European countries. European Standards (ENs) and other standardization deliverables are adopted by CEN and CENELEC, are accepted and recognized in all of these countries. These standards contribute to enhancing safety, improving quality, facilitating cross-border trade and strengthening of the European Single Market. They are developed through a process of collaboration among experts nominated by business and industry, research institutions, consumer and environmental organizations, trade unions and other societal stakeholders. CEN and CENELEC work to promote the international alignment of standards in the framework of technical cooperation agreements with ISO (International Organization for Standardization) and the **IEC** (International Electrotechnical Commission).