



Horizon Europe - European Partnerships to be implemented as joint undertakings

For improved performance of Joint Undertakings (JUs) and the large-scale deployment of new technological solutions—enabling responses to current European challenges in competitiveness, sustainability, and sovereignty—it is essential to consider certain aspects and propose evolutions in both the positioning and operational models of JUs. Nevertheless, JUs remain effective instruments for addressing tomorrow’s challenges through a blend of private investment, high Technology Readiness Levels (TRLs), and state-of-the-art research.

I. JUs’ Agenda and Priority setting

1. Priority and orientations of JUs should be defined within the *quadruple helix* framework (private sector, academia, policymakers, and civil society) to ground projects in market realities, research and innovation needs, EU long-term vision and values, and societal challenges. Furthermore, a dialogue with policymakers should ensure that the partnership aligns with the EU’s long-term vision. This could also be achieved by more actively involving academia and civil society in decision-making bodies.
2. For an effective inclusion of academia in the development of the JU’s Strategic Research and Innovation Agenda (SRIA), it is crucial to ensure sufficient time—for example 2 months— for reflection, input and feedback from a range of, often highly diversified, scientific communities.
3. JUs must have sufficient and balanced funding to both develop a comprehensive and impactful SRIA and meet the EU’s ambitions. This adequate financing should enable them to clearly define priorities, set ambitious goals beyond current research, identify and fill gaps in various research fields, and fully contribute to achieving European objectives.

II. JUs and EFC’s Articulation

4. JU’s should be allowed to independently propose strategic roadmaps to achieve the broad priorities set by the EFC for the next programming

period. In particular, JUs must not be constrained by the EFC's future governance or comitology during the development of their SRIAs.

- Consequently, JUs should establish roadmaps to meet major European priorities. Moreover, JUs must also remain adaptable to emerging challenges, disruptive technologies, or fundamental scientific breakthroughs in other research fields (with strong academic support). Periodic revisions of the SRIA would ensure this flexibility throughout the partnership lifespan.
5. The interaction between JUs and the ECF must enable progress beyond Technology Readiness Level (TRL) 8 by financing industrial scaling and market deployment to ensure effective diffusion and up-take of new technologies.

III. Enabling the large-scale Deployment of Technologies

6. The private sector's financial contribution within JUs must increase to truly unlock the potential of achieving EU-set goals. A stronger public investment is required to pursue more ambitious and riskier activities. In particular, public funding should support the deployment of new technologies on European soil or in partnership with third countries in the framework of desirable industrial alliances, to prevent offshoring to lower-labor-cost countries.
- This risk-taking approach could target promising disruptive technologies after their identification, selection, and impact potential assessment has been evaluated (following an ARPA-like model or through the EIC Advanced Innovation Challenges).
7. JUs must also facilitate the deployment of technological solutions for the benefit of SMEs and regional ecosystems, thereby supporting the EU's economic development as a whole.
8. A fully integrated Single Market is essential for upscaling and for the large-scale deployment of new technologies, particularly disruptive ones. Such technologies require a sufficiently large market to compete with established alternatives.
- Monitoring the deployment of previous JU-developed technological solutions is also necessary to identify obstacles to large-scale adoption.

IV. Rationalization of JUs and Structure

9. While aligning JUs with the ECF's strategic windows is essential, it is preferable not to excessively limit the number of thematic JUs to avoid marginalizing smaller yet relevant research topics compared to more dominant ones. For example, biotechnologies should not focus solely on the medical sector, but must also promote the research of technological solutions for agriculture and other fields.
10. If JU rationalization remains necessary, it should focus on the most impactful and strategic domains for EU's main priorities, namely,

competitiveness, resilience, strategic autonomy, and economic development. This rationalization should prioritize: **the Bioeconomy, the Protection of the Environment, Energy and Decarbonization, Health, Industry 5.0 and digital (including AI), Material value chains and Social Sciences and Humanities (SSH).**

- Beyond their cross-cutting role, SSH could also be the subject of dedicated and agile JUs, allowing Europe to fully leverage their expertise and research to anticipate societal changes, sustainability concerns—arising from advancements in other disciplines—and move beyond the reductive role of "social acceptability" often assigned to SSH.

11. A broader JU architecture, aligned with strategic windows yet thematically focused, must overcome siloed approaches to promote technological deployment and strengthen the EU's capacity to address its major challenges. A more horizontal approach would also enable the adoption of technologies developed in one JU across other domains or partnerships, fostering wider diffusion of solutions.



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