

# **ESRE POSITION PAPER ON THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION (2028–2034)**

**Including a Dedicated Sovereign Capability Maturation Layer for Strategic Sectors**



## 1. Introduction: Aligning FP10 with the New Economic Agenda

The European Association of Space Research Establishments (ESRE) strongly supports the Commission's vision to place Research and Innovation (R&I) at the core of Europe's economic strategy. Europe faces a "critical innovation deficit" and a lack of focus on deep-tech breakthroughs.

For ESRE, the 10<sup>th</sup> Framework Programme (FP10) is not merely a funding tool, but the primary instrument to bridge the "Valley of Death" between scientific excellence and industrial leadership. However, to achieve the goals of the "Choose Europe" agenda, FP10 must preserve its strategic autonomy and provide a stable, excellence-driven environment for Research and Technology Organisations (RTOs).

To secure Europe's long-term strategic competitiveness and guarantee a realistic transition from research to operational capability, the full TRL spectrum must be addressed within new generation TIs through a differentiated funding architecture: TRL 1–4 supported via bottom-up, research-driven actions led by RTOs and universities; TRL 4–6 structured around coordinated industry–RTO maturation combining technological validation with targeted priorities; and TRL  $\geq 7$  implemented through top-down, industry-led system demonstration and pre-deployment activities aligned with EU operational programmes.

FP10 must therefore go beyond excellence-driven research and structurally integrate sovereign capability maturation mechanisms that prevent technological fragmentation and ensure credible European deployment pathways in strategic domains such as space.

## 2. Safeguarding the "Knowledge Triangle" through Programme Autonomy

The Draghi Report warns against the fragmentation of EU resources. ESRE emphasizes that for R&I to be effective, FP10 must remain a self-standing, independent programme under Article 182 TFEU.

- Decoupling from short-term cycles: While a transparent and clearly defined alignment with the European Competitiveness Fund (ECF) is necessary for industrial scaling, FP10 must retain its own governance and long-term research rationale, involving all stakeholders—Universities, RTOs, and Industry—with adequate representation at all decision levels. ESRE warns against reallocation of Horizon Europe funds to other purposes within the ECF. RTOs, as well as Academia and also the industry, require a 7-year predictable horizon to maintain the complex infrastructures and human capital that underpin Europe's strategic autonomy.
- Alignment with broader competitiveness instruments may be necessary for industrial scaling, but FP10 must retain its own governance logic and multiannual stability. In capital-intensive and high-risk sectors such as space, this predictability is essential to maintain qualification environments, large-scale test facilities and pre-competitive integration capacities. As the key stakeholders in this process, RTOs are essential to ensuring long-term credibility and stability, bridging the gap between research and industrial application.

### **3. Strengthening Pillar II: The Engine of Industrial Transformation**

The Draghi report identifies the lack of "scale-up" and industrial application as a primary weakness and the New European Innovation Agenda also highlights the importance of scale-up and industrial transformation in deep-tech sectors. ESRE recalls that RTOs are the natural bridge in this process. ESRE therefore advocates for:

- Introducing a structured capability maturation track for system-forming technologies, particularly in space, ensuring coordinated progression from laboratory validation (TRL 1–3), through subsystem integration (TRL 4–6), both in Horizon Europe Pillar II, to demonstrator-level validation and transition pathways toward EU operational programmes (TRL  $\geq$ 7) within the ECF.
- Recognizing the Crucial Role of Collaborative Research and partnerships: Pillar II is the only space where RTOs, Academia, and Industry co-create at scale. We urge the Commission to resist any shift that would prioritize support to individual startups (Pillar III) at the expense of large-scale collaborative clusters, but rather to favour complementarity between all levels of technological maturity (TRL 3-7).
- Secure a substantial budget specifically for Space Research dedicated to civil and dual applications, at the height of the EU space ambitions, clearly separated from the one for research on Resilience & Security and for Defence Industry.
- Strengthening the IOD/IOV programme through the strategic inclusion of experimental payloads on European institutional satellites, thereby maximizing the utilization of existing space infrastructure.
- Boosting RTO participation and mandatory SME participation in collaborative Pillar II projects within strategic technology domains. RTOs should structurally lead early high-risk system integration phases (TRL 1–4), while SMEs must be embedded as core subsystem innovators within integrated consortia.
- This approach ensures continuity across the innovation chain and prevents excellence in research from failing to translate into sovereign deployment.

### **4. Supporting Research and Technology infrastructures for a unique innovation ecosystem**

The Draghi report clearly claims for the need to develop and support world class infrastructures as a key element to boost innovation and European competitiveness. On these Research and Technology infrastructures, ESRE:

- Welcomes the clear focus on dedicated support for Research and Technology Infrastructures in Pillar IV of the next FP10. The establishment of a new generation TI for Space is a must, as these facilities, mostly managed by RTOs, allow European

companies to test and de-risk technologies at TRL 4–6, significantly reducing time-to-market.

- Supports any action easing SMEs and start-ups access to Research and Technology Infrastructures and claims for a central role of RTOs in the set-up of related tools and strategies.
- Recalls that Member States remains primary end-users and direct or indirect shareholders of such infrastructures that fit their national priorities and interests and therefore calls to refrain from a pure community “marketplace” approach.
- Suggests linking actions supporting Research and Technology Infrastructure in Pillar IV to goals and topics addressed in Pillar II of FP10 while ensuring strong linkage with Pillar II priorities. Access mechanisms for SMEs and start-ups must be simplified and strategically designed, with RTOs playing a central role in governance and operational implementation.

## **5. Overcoming Participation Barriers: Funding for Impact**

The proposal to cap industrial funding at 70% (for non-SMEs) poses a significant risk to the "Innovation-to-Industry" pipeline. Industrial participation across the full value chain is essential for structured TRL progression and sovereign capability maturation.

- **Proportional Simplification:** Simplification (e.g., Lump Sums) must not lead to "risk-shifting" or increased administrative load (e.g., shifting administrative burden from the accounting to the project preparation phase) towards participants. ESRE advocates for a flexible approach to financial reporting that reflects the high-risk nature of these developments.

Simplification measures, including Lump Sum funding models, must be carefully designed to preserve inclusiveness and balanced participation across the innovation ecosystem. While lump sums can streamline administration and improve budget predictability, their structuring, particularly in large system-level procurements, may unintentionally favour vertically integrated industrial actors if no safeguards are embedded.

## **6. Strategic Autonomy and Dual-Use Synergy**

The Draghi report calls for a more integrated approach to Europe’s defence and civil technological base.

- **Synergies, not Diversion:** ESRE supports the exploration of dual-use potentials. However, FP10 must remain the bastion of civil R&I. Defense-related research should be complementary and funded through different programmes, ensuring that civil societal challenges (Green/Digital) remain adequately resourced.
- **Synergies, not Diversion:** ESRE also supports the CASSINI programme for space business development but notes that its business-oriented nature for

competitiveness is not in line with the research and development objectives of Horizon Europe and ought therefore to be supported through the ECF to alleviate the budget of Horizon Europe.

- Protecting IPR: For RTOs to function as innovation hubs, the rules on Intellectual Property in dual-use contexts must be clear, enabling commercial spin-offs while protecting security interests.
- Protecting European innovation: non-EU reviewers should no more be allowed to review R&I proposals on competitive topics or on strategic research.

Early-stage RTO-led development should account for interoperability, resilience and security requirements to ensure smooth transition into civil or defence operational frameworks where appropriate.

## **7. Conclusion and Recommendations**

FP10 must incorporate a structured sovereign capability maturation layer, particularly in strategic sectors such as space, where global competition is intensifying in in-orbit servicing, sustainability and autonomous operations. Without such mechanisms, Europe risks remaining strong in research while dependent in deployment.

To translate not only the recommendations of the Draghi Report but the Union's wider competitiveness and strategic autonomy ambitions into concrete results, ESRE urges the Commission to:

1. Protect the Autonomy of FP10 to ensure a stable, long-term R&I ecosystem.
2. Bolster Pillar II as the primary vehicle for industrial competitiveness and strategic autonomy specifically for the space domain.
3. Secure a substantial budget specifically for Space Research dedicated to civil and dual applications, at the height of the EU space ambitions, clearly separated from the one for research on Resilience & Security and for Defence Industry.
4. Implement a differentiated TRL-based funding architecture covering TRL 1–6 (Horizon Europe) and TRL 7-9 (ECF) with defined transition pathways toward EU operational programmes.
5. Safeguard and strategically link Research and Technology Infrastructures to competitiveness objectives.
6. Ensure funding conditions that preserve full value chain participation and industrial engagement.

ESRE stands ready to collaborate with the Commission to ensure that FP10 becomes the cornerstone of a more competitive, resilient, and innovative Europe.