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Bridging the Fragility Gap: The Strategic Role of Applied Research Organisations in EU FP10 (2028-2034)

A Place-Based Innovation Framework for
Territorial Cohesion

ABSTRACT

As the European Union prepares for the 10th Framework Programme (FP10) for Research and Innovation (2028-2034), the persistence of "left-behind" regions remains a critical challenge to territorial cohesion. This research analyzes the potential of Applied Research Organisations (RTOs) to serve as strategic anchors in addressing territorial fragility. While traditional cohesion policies have often relied on funding absorption capacity that lagging regions lack—the "Regional Innovation Paradox"—evidence suggests that RTOs possess unique capabilities for place-based innovation that

fundamental research institutions often miss. By synthesizing recent literature on innovation modes, smart specialisation (S3/S4), and regional ecosystems, this paper argues that FP10 must explicitly target the institutional capacity of RTOs to mitigate innovation deficits in fragile territories.

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1 Introduction

The European Union's cohesion policy faces a persistent dilemma as it approaches the 2028-2034 programming period (FP10): despite decades of investment, significant disparities remain between innovation leaders and "lagging" or "fragile" regions. These territories, often characterized as "left-behind places," suffer from structural deficiencies that prevent them from fully participating in the knowledge economy [1].

A central critique of current policy mechanisms is the "Regional Innovation Paradox," where the regions with the greatest need for innovation support have the lowest capacity to absorb public funds effectively [2]. This suggests that simply increasing funding volume in FP10 will be insufficient without new structural intermediaries capable of bridging the gap between high-level policy objectives and local economic realities.

This paper argues that Applied Research Organisations (RTOs)—distinct from fundamental research universities—are uniquely positioned to address this gap. By analyzing the specific innovation deficits of fragile regions [3] and the operational models of RTOs [4], we present a case for positioning RTOs as central pillars of the next generation of Smart Specialisation Strategies (S4).

2 Territorial Fragility and Innovation Deficits

Territorial fragility in the EU context is not merely a measure of low GDP; it is a systemic condition characterized by innovation deficits, demographic decline, and weak institutional governance. Recent scholarship defines these "left-behind places" as suffering from a lack of dynamic innovation hubs and insufficient harnessing of local talent [3].

2.1 The Regional Innovation Paradox

The core challenge for cohesion policy is that lagging regions often lack the "absorptive capacity" to utilize R&D funding effectively. Muscio et al. (2015) demonstrate that while funds are available, the fragmented nature of local innovation

systems prevents their conversion into economic growth [2].

These regions exhibit:

- Weak collaboration networks between research and business.
- Low demand for R&D from the local private sector.
- Brain drain, leading to a scarcity of skilled human capital [3].

Furthermore, these regions are often locked into low-value-added stages of global value chains, making it difficult to diversify economically without external intervention [5]. The “innovation mode” in these areas is frequently disconnected from the formal R&D structures that EU framework programmes typically fund [6].

3 The Unique Capacity of RTOs

To address these deficits, distinct institutional actors are required. While universities are crucial for human capital development and fundamental knowledge, their incentives are often aligned with global academic metrics rather than local economic relevance. In contrast, RTOs demonstrate a stronger aptitude for “place-based” innovation.

3.1 Cognitive Proximity and Applied Focus

RTOs are characterized by their “cognitive proximity” to firms, enabling them to translate complex technological concepts into incremental, market-ready outputs [4]. Unlike universities, which prioritize novel scientific discovery, RTOs often operate as “super intermediaries” that focus on:

1. Problem-solving for local SMEs.
2. Technology transfer and licensing.
3. Spin-off creation that directly impacts the regional economy.

Virolainen et al. (2025) highlight that Universities of Applied Sciences (UAS) and RTOs are evolving to become central actors in regional ecosystems, bridging the “valley of death” between research and commercialization [7]. This applied focus makes them more effective at engaging with the “low-tech” or “medium-tech” industries prevalent in lagging regions.

3.2 Track Record in Ecosystem Development

Evidence from successful innovation agencies (e.g., Fraunhofer in Germany, INO in Canada) suggests that RTOs do not just perform research; they construct the market for innovation. Khelifaoui and Bernier (2023) find that RTOs act as entrepreneurship instruments, creating dynamic systems of innovation where none existed before [4]. This “market-making” function is precisely what is missing in fragile regions.

4 Strategic Alignment for FP10 (2028-2034)

For the 2028-2034 programming period, the integration of RTOs into cohesion policy must move from passive participation to active leadership.

4.1 Evolving Smart Specialisation (S4)

The current Smart Specialisation Strategies (S3) have faced implementation challenges in lagging regions due to weak governance and a lack of “entrepreneurial discovery” [8]. For S4/FP10, the policy should evolve to:

- Explicitly fund institutional capacity: Instead of project-based funding, FP10 should support the establishment and operational stability of RTO branches in fragile regions.
- Mandate RTO leadership: Require RTOs to lead regional innovation consortiums, leveraging their project management and industry engagement skills [9].
- Mission-Oriented Focus: Align regional strategies with broader EU missions (e.g., Green Deal) but grounded in local capabilities, a process where RTOs can serve as the translation layer [10].

4.2 Mitigating the Governance Gap

Fragile regions often suffer from poor public governance. RTOs can serve as stable, semi-autonomous “institutional anchors” that maintain innovation strategies across political cycles. By embedding RTOs deeply into the regional governance structure, the EU can ensure better continuity and more professional management of structural funds [8].

5 Conclusion

The case for prioritizing Applied Research Organisations in the EU's 2028-2034 research programming is robust. Territorial fragility is not solved by funding alone but by building the institutional architecture necessary for innovation. RTOs, with their applied focus, industry proximity, and market-making capabilities, offer a viable solution to the deficits that plague lagging regions. FP10 represents a critical window to shift from a university-centric model to one that leverages RTOs as the primary engines of territorial cohesion.

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