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RTOS AND SMART SPECIALISATION

Introduction

- RTOs as key innovation infrastructures
- Diverse missions and forms
- Mix of national and regional orientation
- Often with technology or sectoral specialisations

- So potentially important institutions in smart specialisation strategies
- This report seeks to examine what role they are currently playing and what role they might play, and how regions might involve them more in future

The S3 concept

- Builds on the concept of the regional innovation system
- Promotes the idea of diversification into specialised areas of activity related to existing strengths
- Place-based policy, tailored to regional characteristics
- Central role of entrepreneurial discovery process to identify new opportunities
- Regions are interconnected and knowledge is traded between regions

RTOs

- "regional and national actors whose core mission is to harness science and technology in the service of innovation or public bodies and industry, to improve the quality of life and build economic competitiveness in Europe. RTOs are generally non-profit organisations and their revenues are re-employed to fund new innovation cycles."

- Diverse in character, technology and spatial orientation

- Some RTOs have been specifically charged with a regional mission

RTOs play a multiple role in smart specialisation

- They contribute to entrepreneurial discovery process
- They play an important role in connecting actors
- They build research and technology capacities and contribute to technology transfer

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Entrepreneurial discovery process	Connecting stakeholders	Capacity building and technology transfer
Provide for evidence-based input	Connect stakeholders geographically (in the region, country and internationally) and among the sectors	Transfer knowledge to SME clusters and help SMEs articulate demand for research and technology
Involve different regional stakeholders	Interact continuously with the industry and public administration in the region	Support emerging activities and enhance capacity building close to the market
Are aware of regional strengths and weaknesses	Search for good national and international partners for the regional clients	Help create new business opportunities by creating accelerator incubators and involving disruptive technologies, entrepreneurs, capital, etc.
Have (long) experience with implementation of regional/ national research and innovation strategies	Connect with local population and make research and technologies popular across generations	Contribute to improvement of technological capabilities aligned with RIS3 priorities
Participate in monitoring - gather and organise information relevant to RIS3 implementation	Carry out forward-looking activities, consultancy and advise service for other regions	Help public administration innovate by means of independent competitive policies (consultancies, demonstrations, eservices, eGovernment, etc.)
Can provide advice on revising and updating the RIS3		Raise awareness and promote ongoing constant and effective discussions among stakeholders

Three key contributions

- Analysis of needs and opportunities as part of the entrepreneurial discovery process

- Building an international dimension through RTO international networks

- Providing technology and innovation support as a central resource for industry clusters

Analysis of needs and opportunities

- RTO experience of analysing firm needs and new technological opportunities

- Support for regional governments on innovation policy

- Key role in the entrepreneurial discovery process – identifying the technological opportunities being pursued by the entrepreneurs within a region and how these combine with regional expertise and assets to form the basis of new clusters

Building an international dimension

- RTO involvement in European and international networks and value chains
- Participation in H2020 projects
- RTO may be in an ideal position to identify cross-border linkages and to source knowledge from other regions

Technology and innovation support

- RTOs often central to regional clusters

- Expertise from the RTO helps to raise the level of knowledge exchange within the cluster

- RTOs could play a core role in providing practical support to the cluster organisation in mapping out firms and technologies

- Role in the facilitation of cluster interactions

Recommendations

- Public agencies involved in the development of smart specialisation strategies should seek to better involve RTOs in the design and implementation of RIS3s

- RIS3s may support interventions to encourage collaboration between RTOs and SMEs for knowledge exchange and innovation support.

- Public authorities and RTOs need to discuss the threats and opportunities related to internationalisation including the return on public investments in the region as well as the need of RTOs to grow and compete internationally

- RTOs can provide support for cluster coordination as an organisation trusted by the business community

- Regions should consider how best to support RTO involvement through different funding models including but not limited to ERDF

Final points

- RTOs offer a core set of skills and competences needed by regions to successfully develop smart specialisation strategies

- But RTOs distributed unevenly across the EU and are varied in mission – less well placed to assist social innovation in less industrialised regions

- Internationalisation is a key challenge, but a crucial role in supporting firms

- Regions lacking RTOs have to reach out to RTOs in other regions and countries