Smart specialisation interactions between the regional and the national

Insights from the multi-level tensions in the Portuguese case

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Implementation of RIS3 in Portugal

- Portugal was one of the EU member-states that **implemented a multi-level governance system** for the development of its smart specialisation strategy.

- From the beginning there were **two parallel but somewhat detached processes** for the RIS3 development.

- At regional level, CCDRs, the regional agencies that manage the regional operational programmes were fast in adapting to the "RIS3 movement" and adopting the principles of smart specialisation to develop more or less robust place-based strategies.

- At country level, national agencies, such as IAPMEI, FCT and ANI, tried to retain for themselves some control of the RIS3 process and presented a national strategy, the so-called **ENEI - *Estratégia nacional de especialização inteligente*** that worked to fulfil the *ex-ante* criteria for ESIF access during 2014-2020 in this member-state.

- Regional RIS3, even if deeper and consolidated, were presented as an appendix of ENEI.

Implementation of RIS3 in Portugal

▪ Today is consensual among Portuguese key stakeholders that some **tensions in the RIS3 process emerged from that initial moment** and that the multi-level articulation and governance needs revision.

▪ **The challenges for RIS3 in peripheral regions** are even greater.

▪ One of these challenges regards obviously **governance**, as commonly institutional frameworks are not mature, relevant actors lack of key capabilities, often there are actors or functions missing in the ecosystem, and a chronical lack of financial resources to implement an ambitious agenda for structural change such as any RIS3 can be.

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ENEI - The National Smart Specialisation Strategy in Portugal

The vision of ENEI is based on four fundamental pillars:

Digital Economy
- Portugal as an European ICT actor

Portugal a country of science and creativity
- Explore existing capacity in Energy, Biotechnology and Health
- Stimulate the cultural and creative industries
- Exploring national identity and tourism

Intensify the technological capacity of the Industry
- Strengthening the technological intensification of the firms
- Insertion into global value chains
- Exploitation of existing capacity in new materials
- Capacity building in Automotive, Aeronautics and Space and in Transport and Logistics

Valorize endogenous differentiating resources
- Development of innovative high value-added and eco-sustainable products
- Economy of the Sea, Forest, Mineral Resources and Agro-food

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Priorities of ENEI are anchored in five domains:

1. TRANSVERSAL TECHNOLOGIES AND THEIR APPLICATIONS
Energy
Information and Communication Technologies
Raw Materials and Materials

2.INDUSTRIAL AND PRODUCTION TECHNOLOGIES
Production Technologies and Product Industries
Production Technologies and Process Industries

3. MOBILITY, SPACE AND LOGISTICS
Automotive, Aeronautics and Space
Transport, Mobility and Logistics

4. NATURAL RESOURCES AND THE ENVIRONMENT
Agro-food
Forest
Economy of the Sea
Water and Environment

5. HEALTH, WELL-BEING AND TERRITORY
Health
Tourism
Cultural and Creative Industries
Habitat

The RIS3 Multi-Level Governance in Centro (PT)

Centro (capital: Coimbra) is spread over 28,000 km^2 and has around 2.3 million inhabitants, accounting for approximately 31% of Portugal's total area and 22% of the population living in the country.

Centro has a **strategic position** since it is situated between the two major cities: Lisboa and Porto.
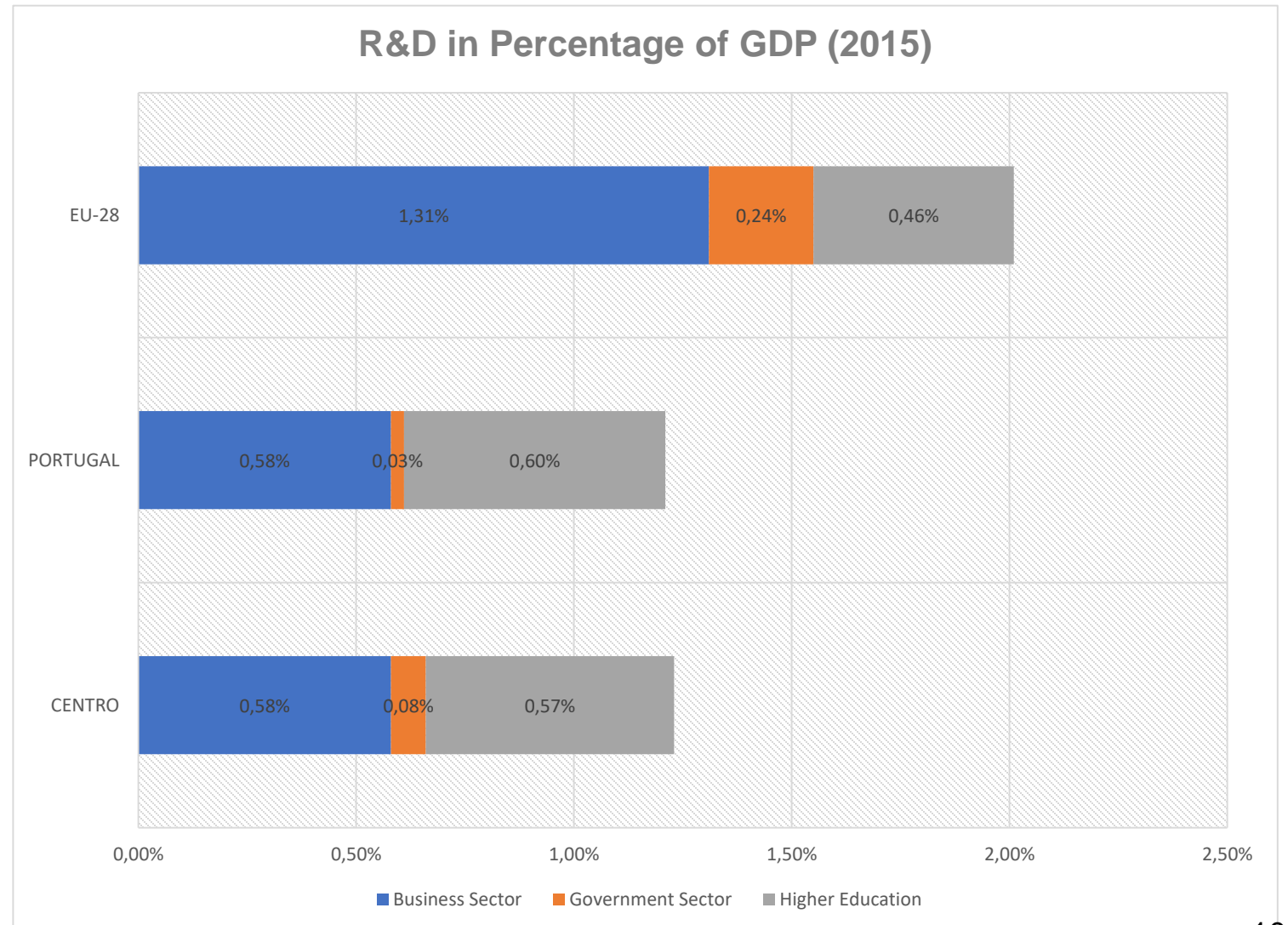

ESIF in R&I per year and per capita

> 28.2

11.2 - 28.2

5.4 - 11.2

< 5.4
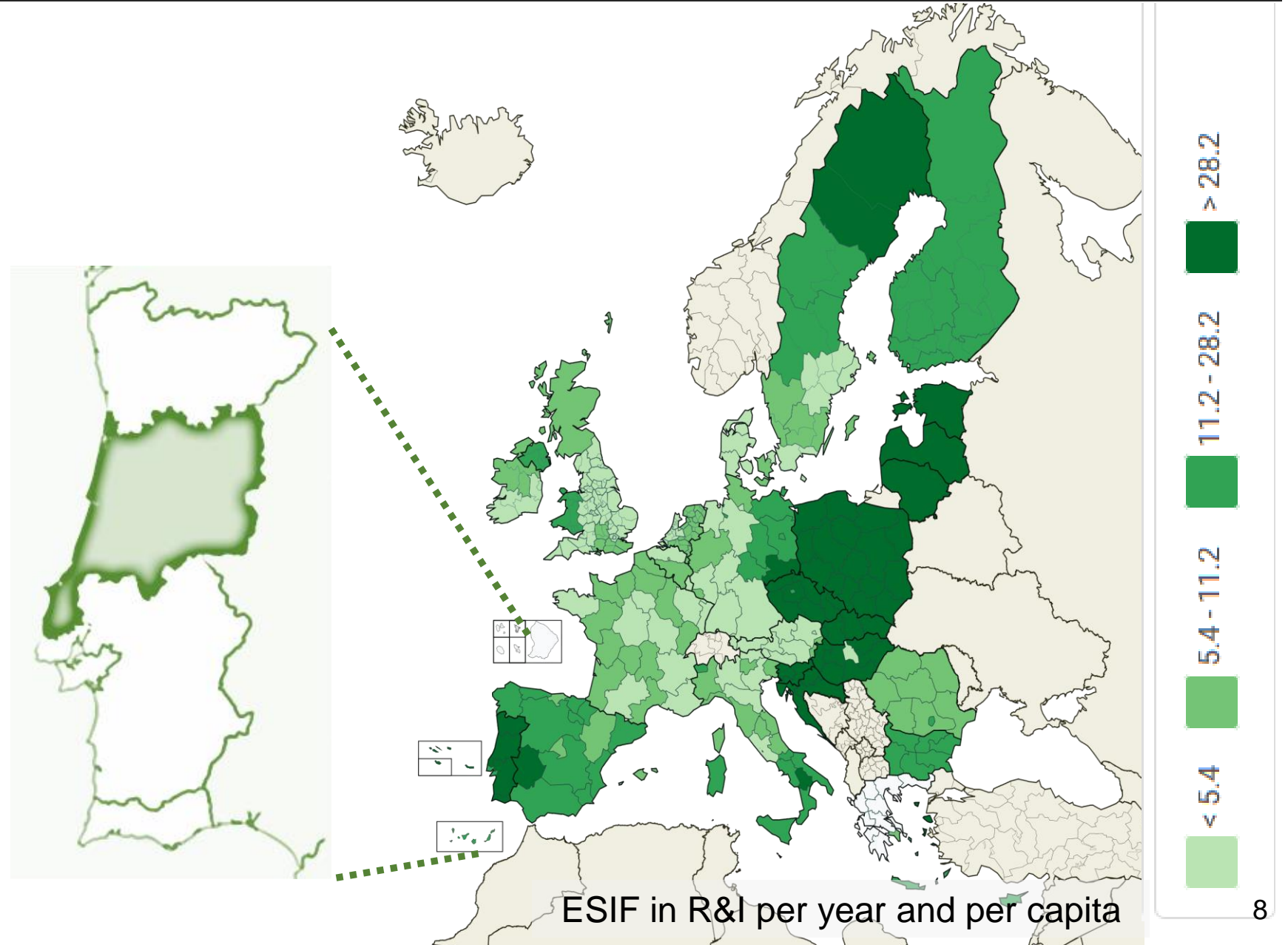
CENTRO: A PORTUGUESE LAGGING REGION IN EUROPEAN TERMS?

Key indicators for smart growth

Indicator (2016)	CENTRO	PT	EU-28
High-Tech Sectors (employment)	1,9%	2,8%	4,0%
Human Resources in Science and Technology (% total population)	23,5%	25,4%	33,2%

R&D in Percentage of GDP (2015)

	Business Sector	Government Sector	Higher Education
EU-28	1,31%	0,24%	0,46%
PORTUGAL	0,58%	0,03%	0,60%
CENTRO	0,58%	0,08%	0,57%

0,00% 0,50% 1,00% 1,50% 2,00% 2,50%

■ Business Sector   ■ Government Sector   ■ Higher Education

EU Regional Competitiveness Index - RCI 2016

Indicator	Score	EU ranking
Overall		
RCI 2016 (0-100)	35.1	191/263
GDP per head (PPS), EU-28=100	66	211/263
Stage of development (1-5)	2	n/a
Basic dimension (0-100)	49.1	195/263
Institutions (0-100)	47.6	153/263
Macroeconomic stability (0-100)	37.9	26/28
Infrastructure (0-100)	20.07	175/263
Health (0-100)	73.6	185/263
Basic education (0-100)	70.8	10/28
Efficiency dimension (0-100)	49.1	192/263
Higher education and lifelong learning	52.5	202/263
Labour market efficiency	57.9	157/263
Market size	17.6	193/263
Innovation dimension (0-100)	27.1	210/263
Technological readiness	47.2	190/263
Business sophistication	20.8	209/263
Innovation	19.5	211/263

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Regional Innovation Scoreboard (RIS) 2017

Centro classified as a "**Moderate + Innovator**" region, with **innovation performance decreasing** over time.

Best performing indicators:
- Non-R&D innovation expenditures
- SMEs introducing product/process innovations and marketing/organizational innovations
- SMEs innovating in-house (higher both relative to the EU and Portugal)
- Innovative SMEs collaborating (similar to the EU and higher relative to Portugal)

Lower than EU scores but higher when compared to Portugal:
- Exports of medium-high/high-tech (MHT) manufacturing
- Sales new-to-market innovations
- R&D expenditures business sector

Worst performances both relative to Portugal and the EU:
- Employment in MHT manufacturing and knowledge-intensive services
- Design applications

Performed poorly when compared to the EU but similar scores to Portugal:
- EPO patent applications
- Public-private co-publications

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Thematic domains

FOREST

TOURISM

MATERIALS

ICT

AGRO-INDUSTRY
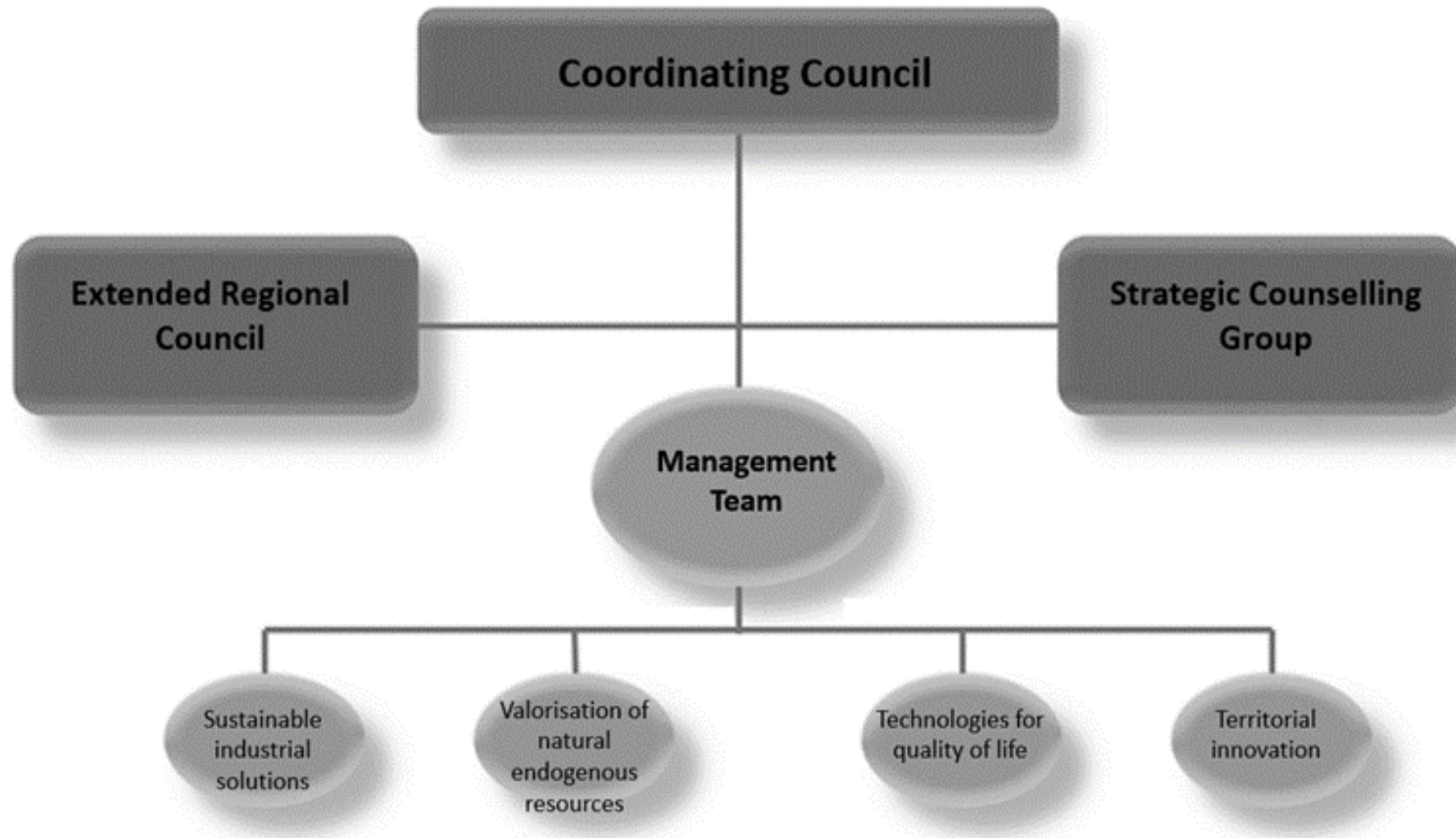
SEA

HEALTH

BIOTECH

Transversal priorities

Sustainability of resources

Qualification of human resources

Territorial cohesion

Internationalization

Motivation and objectives of this study

- Analyze the development of the Portuguese RIS3, in particular multi-level governance tensions

- Debate the possibilities for an effective multi-level shared governance in RIS3

Main interrogation:

Can multi-level governance systems be implemented for RIS3 or national-regional divide is so deep that it prevents any attempts of a real and meaningful articulation?

RIS3 Governance and Complexity

- Multi-level governance in RIS3 is characterized by a **large number** of actors, organizations, agendas and policies, at different levels, local-regional-national-European, to be coordinated in order to achieve a coherent strategy and implementation.

- This can be characterized as a complex situation. We **lack of information and have an incomplete understanding** about how RIS3 multi-level governance really works (*natural complexity*). The process also depends on the interaction of **multiple variables over time** (*dynamic complexity*).

Methodology

Based in interviews to 11 key stakeholders at national and regional level content analysis provided insights for the **crucial challenges** and **dimensions** to be addressed for the implementation of an effective RIS3 governance system. A exploratory connection circle is drawn.

Typology 1: members of the governance system with strategic responsibilities from the public and private sectors. The coordinators of the four RIS3-Centro platforms were interviewed.
- Platform 1 - *Sustainable industrial solutions*
- Platform 2 - *Valorization of natural endogenous resources*
- Platform 3 - *Technologies for quality of life*
- Platform 4 - *Territorial innovation*

Typology 2: members of the governance system with technical responsibilities - CCDR-C

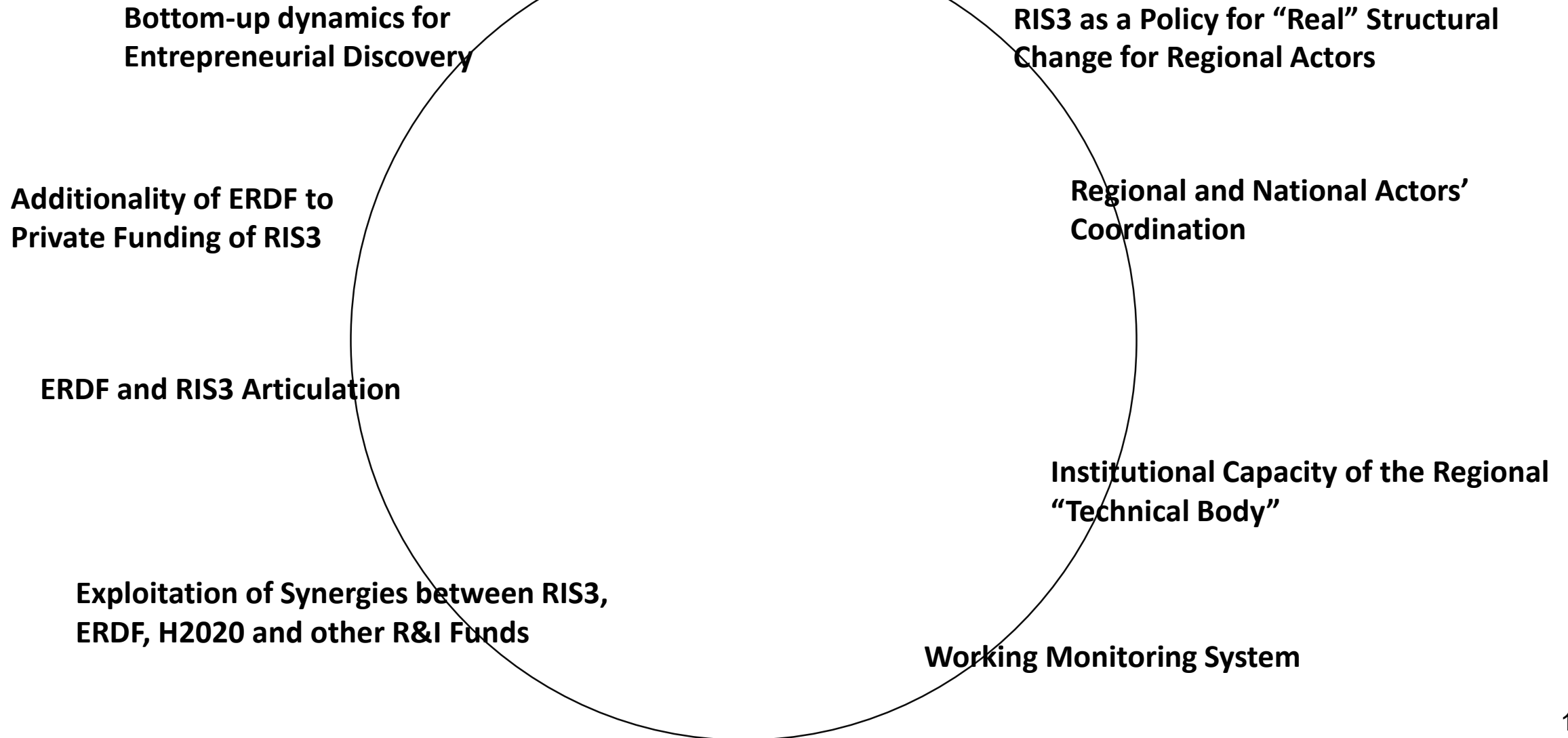**Typology 3:** stakeholders involved in the governance system
4 stakeholders have made the interview. These are managers of organizations that are participating in the Thematic Platforms and are also beneficiaries of projects related with RIS3 schemes.

Typology 4: Members of the national governance system: ANI and AD&C

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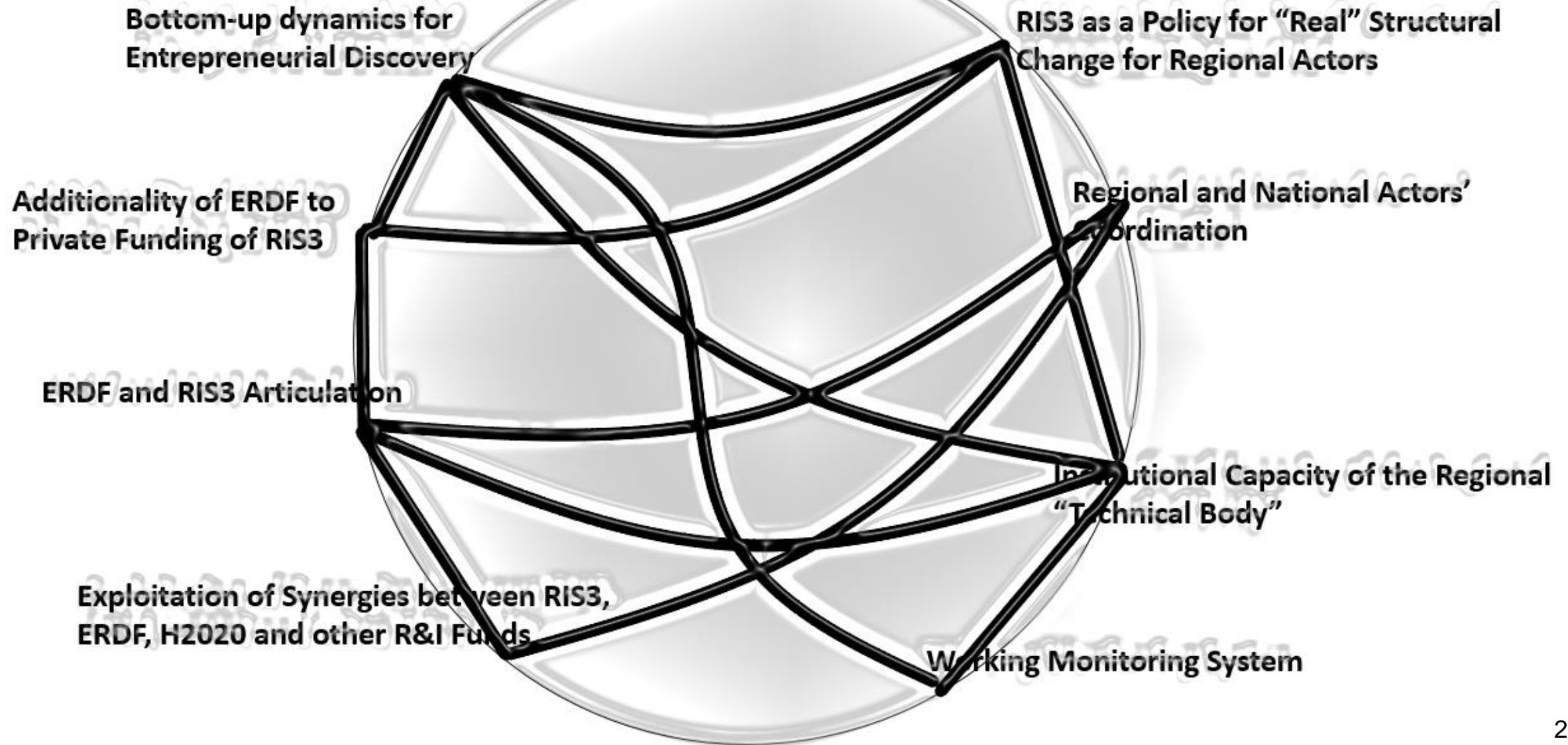
THREE CRUCIAL CHALLENGES

1. the need of a deeper reflection on the **linkages between the priorities** at national and regional level.

2. the revision of the document and implementation of the **ENEI.**

3. the actual implementation of **multi-level governance mechanisms** – including EDP or monitoring - that are referred in the written documents but not yet fully translated into action.

A CONNECTION CIRCLE FOR RIS3 MULTILEVEL GOVERNANCE

**Bottom-up dynamics for
Entrepreneurial Discovery**

**RIS3 as a Policy for "Real" Structural
Change for Regional Actors**

**Additionality of ERDF to
Private Funding of RIS3**

**Regional and National Actors'
Coordination**

ERDF and RIS3 Articulation

**Institutional Capacity of the Regional
"Technical Body"**

**Exploitation of Synergies between RIS3,
ERDF, H2020 and other R&I Funds**

Working Monitoring System

A CONNECTION CIRCLE FOR RIS3 MULTILEVEL GOVERNANCE

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