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ONLINE Platform for Smart Specialisation Policy Advice

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The European Project of Smart Specialisation

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Smart Specialisation:

"policy **prioritisation framework** aimed at finding ways to enhance the **scale and effectiveness** of entrepreneurial processes trying to develop **regions' indigenous potential**"

Smart specialisation to promote *innovation* and *entrepreneurship* via:

- technological diversification
- embeddedness
- connectivity

Basic Argument behind Smart Specialisation

"policy resources must be **prioritised on those activities, technologies or sectors where a region has the most realistic chances to develop wide-ranging and large-scale impacts** which also develop and build on many different local and interregional linkages and connections" (Foray et al. 2012).

A common feature here must be that the entrepreneurial actions contain a sufficient degree of **experimentalism and self-discovery** (Hausmann and Rodrik 2003) as is essential in all forms of innovation.

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Evolution of Smart Specialisation

- **ERA *European Research Area*** and ***Innovation Union* Flagship Programme**
- ***Knowledge For Growth* Expert Group** – nine policy briefs 2006-2009
- **Smart specialisation concept** – Bart van Ark and Dominique Foray – subsequently developed by Paul David, Bronwyn Hall, …
  - Context matters for technological evolution – *knowledge ecology* – in terms of pathways for innovation
  - Depends on existing institutional structures and innovation systems
  - Actors and players are entrepreneurs, universities, research institutes, multinational firms, etc …
  - Shift from a sectoral discourse to a **regional discourse** (McCann and Ortega-Argiles) – related technological diversification, connectivity, embeddedness – evolutionary approach to regional policy
- **Smart Specialisation Platform** – JRC technical guides, workshops and technical reports to support and evidence S3 implementation
- Additional projects - ex: SmartSpec, Online S3, RELOS, EURIPER, Beyond EDP

European Policy Contextualisation

- Europe 2020 Economic Growth Strategy
- The EU Budget Review [COM(2010)700]
- Regional Policy Contributing to Smart Growth in Europe [COM(2010)553]
- Investing in Europe's Future: Fifth Report on Economic, Social and Territorial Cohesion, 2010
- Legislative package for cohesion policy for the period from 2014-2020
- Flagship initiatives *Innovation Union; An integrated industrial policy for the Globalisation Era; Digital Agenda; Youth on the Move; Agenda for New Skills and Jobs; A European strategy for Key Enabling Technologies - A bridge to growth and jobs; New Skills Agenda*
- *EU ex*-ante conditionalities (R&D conditionality, Digital agenda- ICT, SME conditionality and the statistical system and results indicators)
- European Fund for Strategic Investments, European External Investment Plan
- Horizon2020 Policy Support Facility & Structural Reform Support Service
- Pilot Actions (Industrial transition regions; Interregional partnership for innovative projects)
- Thematic Smart Specialisation Platforms

Smart Specialisation Principles

- The smart specialisation principles: achieving smart growth based in obtaining the _most efficient innovation results with the most effective way of spending public resources._
- Based on the notion that **regions cannot do everything in STI**, in particular in time of scarcity of resources: **Focus**, **Prioritisation** and **Discovery** of regional strengths and competitive advantage become crucial!
- Focus and concentration of _resources_ on certain **_domains of expertise_**, where new R&D&I will complement the region's other productive assets – potential competitive advantage/ Getting better/ excel with something specific, considering the Global context, promoting connectivity
- No top-down decision, but **stakeholder discovery process**, participatory governance processes, public consultation, citizens involvement
- Priority-setting **avoiding fragmentation and duplication/imitation**
- Accumulation of **critical mass**: involving actors as anchors in the innovative cycle

Smart Specialisation Principles

Considering that:

- **"No one size fits all"** (peripheral, rural, lagging, innovation driver, urban, natural resources based, fiscal decentralised,…)
- **Evidence-based**: what regions can <u>realistically achieve</u> building on their historic strengths and existing assets (evolutionary perspective, path dependency, heritage).

•Policies must be tailored to the local context, acknowledging that there are different <u>pathways for regional innovation and development</u>. By:

a) **rejuvenating traditional sectors** through higher value-added activities and new market niches (mining *Silesia*; shipbuilding *Skåne;* automotive *West Midlands);*
b) **modernising** by adopting and disseminating new technologies (logistics *Flanders);*
c) **diversifying technologically** from existing specialisations into related fields (Aeronautics in *Toulouse* to GPS technologies);
d) **developing new economic activities** through **radical technological change** and **breakthrough innovations** (Tourism in *Balearic Islands*); and
e) **exploiting new forms of innovation** such as open and user-led innovation, social innovation and service innovation (Historical heritage in *Italy).*
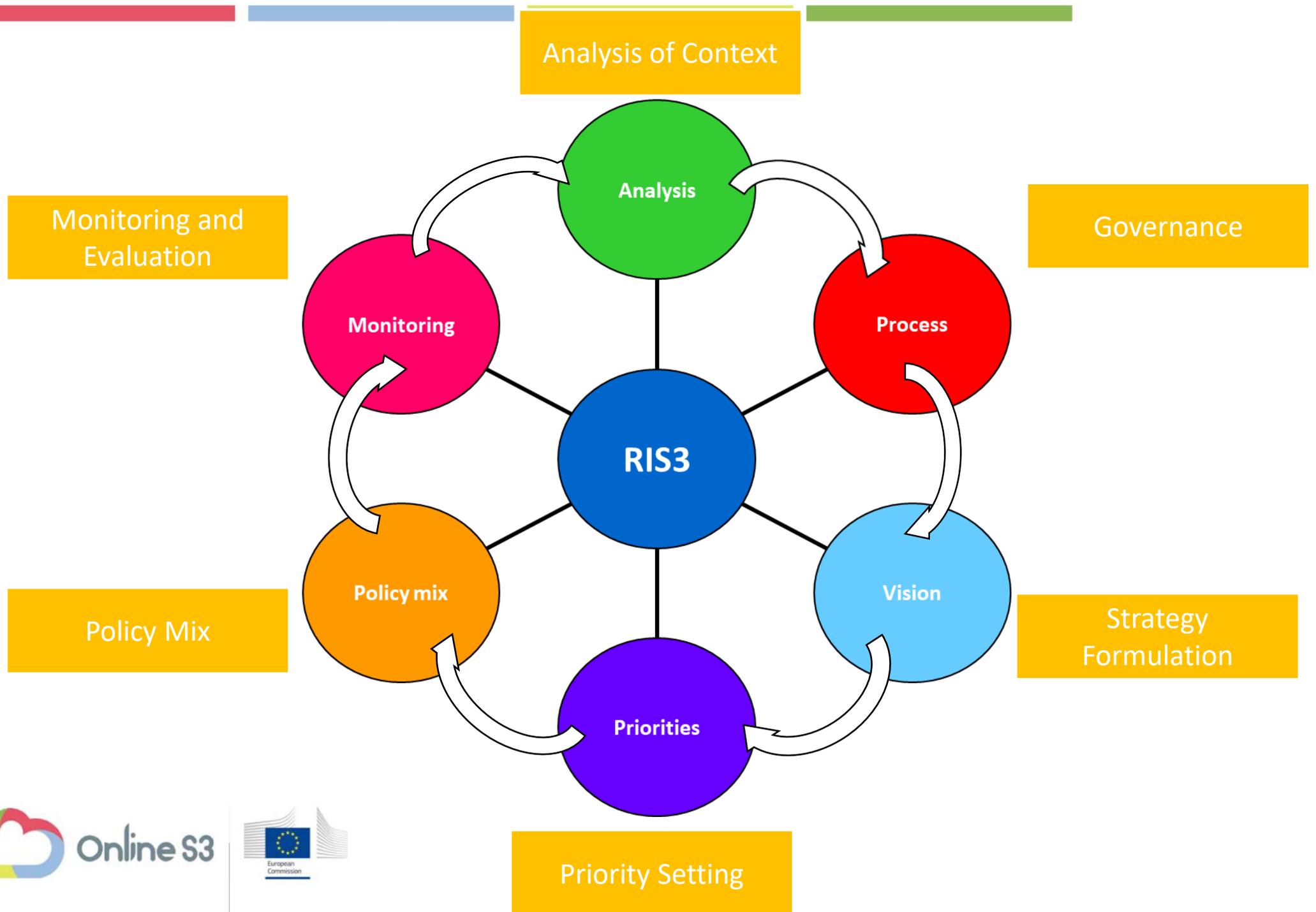
Smart Specialisation Principles

"Smart specialisation is therefore a policy framework aimed at **transforming policy thinking** from top-down vertical sectoral approaches and horizontal innovation policy programmes focused on improving human capital, accelerating transfer of technologies, creating incubators, cluster-policy implementation to a > **holistic, inclusive, place-based bottom up and smart policy mix approach**" (Nauwelaers et al., 2014; Kyriakou, 2017).

Table 1. Old and new paradigms of regional policy

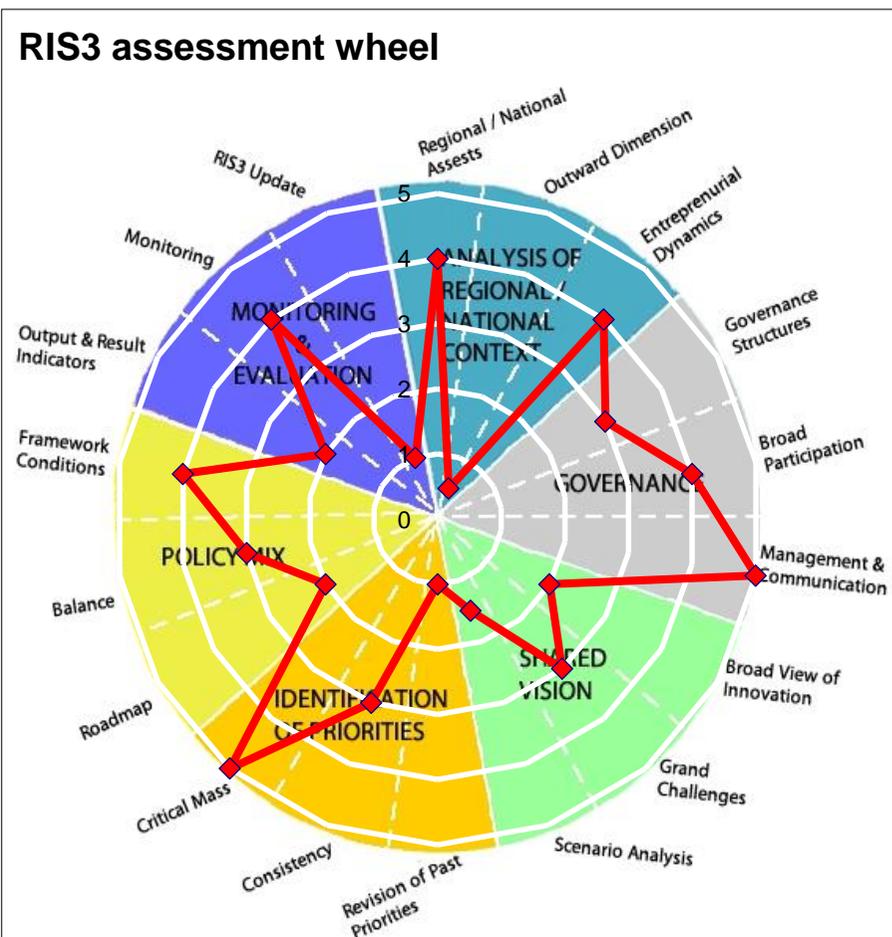|	Old paradigm	New paradigm
Objectives	Compensating temporarily for location disadvantages of lagging regions	Tapping underutilised potential in all regions for enhancing regional competitiveness
Unit of intervention	Administrative units	Functional economic areas
Strategies	Sectoral approach	Integrated development projects
Tools	Subsidies and state aids	Mix of soft and hard capital (capital stock, labour market, business environment, social capital and networks)
Actors	Central government	Different levels of government

Source: OECD (2009), *Regions Matter: Economic Recovery, Innovation and Sustainable Growth.*

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RIS3 steps / Online S3 phases

RIS3/Industrial diversification design and implementation

RIS3 assessment wheel

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Table 1 The 29 methods proposed by Online S3

PHASE	DESCRIPTION	METHOD
1. Governance	The term "governance" refers to government and stakeholder engagement. Governance implies also a quadruple helix approach as the key process of innovation production. This step should be placed at the start of RIS3, setting the framework of the entire process.	1.1. RIS3 vision sharing 1.2. Stakeholder engagement 1.3. RIS3 debate at a glance 1.4. RIS3 legal and administrative framework related to ESIF
2. Analysis of context	"Analysis" is an established and standard term of background information necessary for any strategic planning process. "Context" refers to regional/national specific conditions and existing institutional setting to be taken into account.	2.1. Regional asset mapping 2.2. Research infrastructure mapping 2.3. Clusters, incubators, and innovation ecosystem mapping 2.4. Benchmarking 2.5. Regional scientific production profile 2.6. Specialisation indexes 2.7. SWOT analysis
3. Strategy formulation	"Strategy" formulation (instead of policy formulation) denotes the character of RIS3 as strategy and as a project-oriented intervention. "Shared vision" makes clear the participatory approach in defining the vision and setting objectives.	3.1. Collaborative vision building 3.2. Scenario building 3.3. Delphi - Foresight
4. Priority setting	Definition of activity, focus and priorities of smart specialisation.	4.1. EDP workshops 4.2. Extroversion analysis 4.3. Related variety analysis
5. Policy mix	"Policy mix and action plan implementation" denote the sequence of actions for implementing the strategy. "Action plan" stresses the need for a structured project-driven approach to RIS3 implementation.	5.1. RIS3 intervention logic 5.2. RIS3 action plan co-design 5.3. RIS3 budgeting 5.4. RIS3 administrative framework conditions 5.5. RIS3 calls consultation 5.6. RIS3 innovation maps 5.7. RIS3 open data tool
6. Monitoring and evaluation	"Monitoring and evaluation" (instead of evaluation) refers to the data collection process: the need to create a repository of data to monitor the key processes of smartness.	6.1. RIS3 monitoring 6.2. Definition of RIS3 output and result indicators 6.3. Balanced scorecard 6.4. RIS3 beneficiaries and end users' satisfaction online survey 6.5. RIS3 social media analysis

Bechmarking tools

- Eye@RIS3 (S3 Platform)
- Benchmarking regional structure (Orkestra)
- S3 Inter-regional Trade and Competition Tool
- Regional Innovation Monitor Plus
- European Innovation Scoreboard
- Regional Competitiveness Index
- KETs Observatory
- KETs Technology Infrastructure
- Digital Entrepreneurship Monitor
- Eurostat "Regional Statistics Illustrated" per NUTS2 regions
- Regional Entrepreneurship and Development Index
- Horizon2020 Policy Support Facility

- European Localised Innovation Observatory
- International Benchmarking Database BAKBasel
- The Online Education and Training Monitor
- CityBench-ESPON for benchmarking European Urban Zones
- EUROLIO
- European Cluster Observatory
- Database of Good Practices – Small Business Act
- Industrial information such as: Aeronautics and Space
- Country fiches (S3 Platform)

Source: McCann and Ortega-Argiles, 2016

S3 examples

Multi-level governance and Territorial Reforms
New cross-border governance mechanisms
Norte (PT)/Galicia (ES)
TTR-ELAT: Top Technology Region (Eindhoven/Leuven/Aachen Triangle)
EC: Vanguard Initiative

Evidence-based
For Priority Selection, Monitoring and Evaluation
Developing policy tools with measurable goals.

Prioritization
"Choosing races and placing bets"
Eye@RIS3
Emilia-Romagna (IT): Biomedicine
Extremadura (ES): High-tech Farming
Lapland (FI): Arctic natural resources
Podkarpackie (PL): skill improvements in aerospace

Result-oriented and Performance-based
Galicia (ES): S3 monitoring system – 74 indicators performance/output, results and impact/context
Navarra (ES): SODENA plan
Lower-Austria (AU): Scorecard methodology
North of Netherlands: Innovator Monitor

Good Practices

Experimentation, co-creation and cooperation
University-Industry (Region Norte, PT)
Pilot programmes
Knowledge vouchers
Industrial Relatedness
Catalonia (ES): "Campus Sectorials"
business–led knowledge brokers
EC: Smart Specialisation Platforms

Key role of regional and in particular local authorities
They are essential for tackling the voice of **inclusive growth**
Ensuring political commitment
Synergic approach from different fields of policies (industrial, innovation, education, etc.)

Partnerships
Cooperation with social partners
Slovenia: Open Partnerships for private and public actors
Wielkopolska (PL): Stakeholders Engagement Platforms
Eastern Macedonia and Thrace (GR): Project Development Labs

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Early findings

- **Identifying smarter goals** for a given region is **only a beginning**. RIS3 is not a one-off process, necessary simply to respond to ex-ante conditionalities, but rather an **ongoing process of governance and policy-making upgrading**.
- The early stage experience of RIS3 implementation across many EU regions suggests that the **benefits** of RIS3 tend to be **multi-dimensional** rather than purely technological and research, also involving institutional and governance dimensions.
- Earlier understandings of **innovation and entrepreneurship policy** tended to focus purely on narrow scientific and R&D and firm creation related aspects, whereas today they are more inclusive. They:
    - focus on local and societal aspects
    - involve public and private sector actors
    - engage society via participatory actions
- **Relevant domains** are now activities, tasks or specific technological functions in firms and production processes rather than sectors or industries.

Early findings

- In economically **strong regions** with more *robust institutional and governance systems*, RIS3 often leads to a **refining and sharpening of existing practices**, while in many Southern European regions in particular, RIS3 activities appear to have **led to real progress** (McCann and Ortega-Argilés, 2016).

- On the other hand, in the economically **weakest regions** with *less robust governance arrangements* RIS3 has often proved to be **very challenging**. RIS3 poses challenging demands on fragile or limited institutional frameworks, but at the same time this also offers real opportunities for institutional learning and the upgrading of governance capabilities (McCann and Ortega-Argilés, 2016).

- Increasing the **outward orientation and global engagement** needs bolstering. Need to **integrate and exploit** potential opportunities with **FDI linkages in Eastern Europe** relating to downstream activities closer to the market (Thissen et al. 2013; Radosevic and Stancova, 2015)

- RIS3 has already proved to be an **important narrative for beginning to overcome various institutional blockages** and bringing about **changes to policy making** both **within and beyond the sphere of technological and pure firm formation** matters (Rodrik, 2014).

Thank you very much for your attention!!

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http://www.onlines3.eu

Thank you for your attention