Joint Research Centre
the European Commission's in-house science service

Serving society
Stimulating innovation
Supporting legislation

Smart Specialisation –
What is there for the Countries beyond the EU

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Smart Specialisation Platform
JRC, Growth & Innovation Directorate
Outline

What is Smart Specialisation

S3 Platform Activities

S3P activities is the EU Enlargement and Neighbourhood countries

Launching S3 in Moldova
**Smart specialisation in the EU**

REGULATION (EU) 1303/2013
Applies to the European Regional Development Fund (ERDF)

**Ex-ante conditionality**
A national or regional smart specialisation strategy is in place that:

- **concentrate resources** on a limited set of R&I priorities
- **to maximise the positive impact** on growth and jobs

Over 120 smart specialisation strategies for ERDF prepared

More than EUR 40 billion allocated

To create 350 000 new jobs by the end of the programming period

**Eligibility map 2014-20**

2014-2020 ERDF Eligibility map based on GDP per capita in PPS, 2007-2009
What is **Smart Specialisation**?

= **fact-based**: all assets + capabilities + bottlenecks in a region, incl. external perspective, cooperation potential, global value chains

= no top-down decision but **dynamic entrepreneurial discovery process** uniting key stakeholders around shared vision

= **all forms of innovation**, not only technology-driven, existing / new knowledge

= **ecosystem** approach: creating environment for change, efficiency of institutions

= **differentiation**: focus on competitive advantages, potential for excellence, emerging opportunities, market niches, at the level of activities - granularity

= **concentration of resources** on priorities, problems and core needs, for critical mass/critical potential

= **synergies** across different departments and governance levels (EU-national-regional); cross-sector/technology links – NO Silos Thinking!

= **place-based economic transformation**: rejuvenate traditional sectors through higher-value activities; aiming at developing a strategic approach to territorial development
**S3: The Notion of Specialisation**

*S3 is about developing new specialities based on regional concentration of knowledge, competence and market potentials (dynamic)*

*S3 is NOT to be understood as a sector specialised or relative to other regions (passive)*

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**Sectoral level**
- ICT
- Energy
- Advanced manufacturing

**Activity level**
- **ADVANCED MANUFACTURING FOR ENERGY RELATED APPLICATIONS IN HARSH ENVIRONMENT**

**Modernisation**
- Transition
- Diversification
- Radical Foundation

**Mapping**
- Prioritisation
Smart Specialisation – Participatory...

...ongoing process

- Businesses are best placed to lead the identification of new opportunities for growth in a rapidly globalising economy.

- The process of discovery of the new niches/markets inspire public policies on innovation.

Entrepreneurial in **composition** and **spirit:** (risk-taking, broader view beyond boundaries ...)

- **Business**
  - manufacturing and services, primary sectors, financial sector, creative industries, social sector, large firms, SMEs, young entrepreneurs, students with business ideas, cluster and business organisations, etc.

- **Research**
  - public and private research bodies, universities, science and technology parks, NCPs, Technology transfer offices, Horizon2020 committee members, regional ESFRI roadmaps etc.

- **Public administration**
  - Different departments, if relevant at different government levels, agencies e.g. for regional development, business advice, public procurement offices, incubators, etc.

- **Civil society / Users**
  - NGOs and citizens’ initiatives related to societal challenges for which innovative solutions would be helpful, consumers associations, Talents! etc.

- **Entrepreneurial**
Smart Specialisation Platform

**Broad membership**

**Guidance - Analysis - Support**

**Comprehensive guidance tools** – RIS3 Guide, Digital Agenda Toolbox, FAQs, Implementation Handbook

**S3 Publication series** - Policy briefs co-authored with leading academics and practitioners; Working papers contributing to conceptual and empirical developments related to smart specialisation

**Supporting tools**: S3 self-assessment (assessment wheel), regional S3 priorities (EYE@RIS3), regional benchmarking, bilateral trade flows, ESIF investment

**Some achievements**

**Wide membership**: 180 regions, 21 countries (incl. non EU: RS, MD, ME & regions from NO & TR)

**Strong endorsement** by national/regional policy makers: average 4.5/5 satisfaction ranking

**High "fidelisation rate"**: >50% of regions attending workshops come back

**Political endorsement at EU level**: EC (Hahn, Cretu), EP (Winkler), CoR (Markkula), Council
Design principles for RIS3

1. **ANALYSIS**: discovery of the socio-economic and innovation engines of regional growth, competitive advantages & weaknesses

2. **MAKE CHOICES**: identify a limited set of priorities for development where to concentrate investment

3. **STAKEHOLDER INVOLVEMENT**: setting priorities should be an inclusive and interactive process centred on entrepreneurial discovery

4. **BROAD VIEW OF INNOVATION**: support technological as well as practice-based and social innovation

5. **MONITORING AND EVALUATION**: feeding back information into the policy cycle and allowing strategy revision

Available on the S3 Platform webpage http://s3platform.jrc.ec.europa.eu
Key steps for developing RIS3

Step 1 – *Analysis of regional context/potential*

Step 2 – *Governance*

Step 3 – *Vision for the future*

Step 4 – *Identification of priorities*

Step 5 – *Policy mix*

Step 6 – *Monitoring & Evaluation*
RIS3 Assessment – MOLDOVA

Expert assessment

National assessment

Driving economic change through smart specialisation/RIS3

Informal assessment - Moldova
Main activities of the S3 Platform

Support to lagging regions & Synergies ESIF-H2020 "Stairway to excellence"

S3 Knowledge Base: Guidance and Analysis, RIS3 Guide, DA Toolbox, S3 publications, S3 Seminar Series on Territorial Development

Trans-national focus Peer Reviews (in total 75 regions/countries)

Peer eXchange & Learning Thematic focus on actors, process, common features and priorities

Focused approach on Value Chains - Thematic S3 Platforms: Energy, Agro-Food, Industrial Modernisation....

S3 Website & Newsletters

S3 Interactive web tools

Support to the EU Macro-Regional Strategies & Alignment of innovation roadmaps

RIS3 assessment and support to REGIO desks
Main S3 Online Tools (I)

Benchmarking Regional Structure

Reference regions = those that share similar structural conditions relevant for innovation-driven economic development.

Benchmarking Regional Structure

Finding reference regions based on structural similarities

A key to build sound innovation strategies for smart specialisation at the regional level is to identify opportunities for learning policy lessons and transferring practices from other regions. But what are the regions one should consider as a reference for these purposes? Our proposal is to start by identifying regions that share similar structural conditions which are relevant for innovation-driven development (social, economic, technological, institutional, and geographical characteristics). That is, characteristics that cannot be easily changed in the short term and that are demonstrated to affect the way innovation and economic evolution take place in a region. Below you will find an interactive tool that allows you to identify reference regions across Europe based on a methodology jointly developed by Orkistra – Banque de France Institute of Competitiveness and the S3 Platform.

Interactive tool

The 20 nearest regions to Burgenland (A11)

<table>
<thead>
<tr>
<th>Region</th>
<th>Distance Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kärnten - Austria (A21)</td>
<td>0.0116</td>
</tr>
<tr>
<td>Tirol - Austria (A33)</td>
<td>0.0197</td>
</tr>
<tr>
<td>Provincia Autonoma Trento - Italy (A02)</td>
<td>0.0225</td>
</tr>
<tr>
<td>Steiermark - Austria (A22)</td>
<td>0.0226</td>
</tr>
<tr>
<td>Oberosterreich - Austria (A31)</td>
<td>0.0245</td>
</tr>
<tr>
<td>Salzburg - Austria (A32)</td>
<td>0.0247</td>
</tr>
<tr>
<td>Niederosterreich - Austria (A12)</td>
<td>0.0252</td>
</tr>
<tr>
<td>Vorarlberg - Austria (A34)</td>
<td>0.0273</td>
</tr>
<tr>
<td>Umbria - Italy (E2)</td>
<td>0.0300</td>
</tr>
<tr>
<td>Søddanmark - Denmark (D33)</td>
<td>0.0314</td>
</tr>
<tr>
<td>Comunidade Foral de Navarra - Spain (E22)</td>
<td>0.0319</td>
</tr>
<tr>
<td>Cantabria - Spain (E13)</td>
<td>0.0320</td>
</tr>
<tr>
<td>Sjælland - Denmark (K02)</td>
<td>0.0343</td>
</tr>
<tr>
<td>Poitou-Charentes - France (F53)</td>
<td>0.0347</td>
</tr>
<tr>
<td>Bourgogne - France (F26)</td>
<td>0.0352</td>
</tr>
</tbody>
</table>

How it works

1. Select a region in the top window.
2. Choose the number of reference regions you want to be displayed.
3. Press “refresh” to get the results.
4. A list of regions will appear on the right side of the screen sorted in descending order from the ones that are more similar (top) to the less similar (bottom) to the region selected.
5. The order is given by a synthetic index of structural distance (lower the value, more structurally closer to the selected region) explained in the methodological paper.
Main S3 Online Tools (II)

Inter-regional Trade and Competition Tool

Visualising the trade flows (yrs 2000/2005/2010) between 256 European NUTS2 regions and with the rest of the world.

The revealed competition map shows which region competes internationally with whom, on what and where.

Note! BG, HR and RO not covered! Similarly Non-EU countries not covered!
Main S3 Online Tools (III)
"EYE@RIS3" tool mapping S3/R&I priorities

In total >1380 of regional/national R&I priorities in Europe encoded!

http://s3platform.jrc.ec.europa.eu/map
Main S3 Online Tools (IV)

ESIF-Viewer (visualising planned investments using European Structural and Investment Funds)

http://s3platform.jrc.ec.europa.eu/esif-viewer
S3 Thematic Platforms

Global value chains (GVC) in the context of smart specialisation

What is it about? The GVC aims at assisting regions in their efforts to facilitate the development of **new value chains through the interconnection of regional eco-systems** and their actors in quadruple helix in specific S3 investment areas.

Why? S3 is an engine for the development of European eco-systems that are necessary to gather critical mass for market breakthroughs.

How? Thematic S3 Platform provide a multi-level support mechanism, combining efforts at regional, national and European level, addressing in particular market and system failures that prevent breakthroughs, starting with information and coordination failures. The development of interregional collaboration is driven by opening-up regional smart specialisation strategies.

Thematic S3 Platforms on Energy, Agro-Food, Industrial Modernisation
Smart Specialisation beyond the EU
JRC's Enlargement and Integration Action

S3 pilot project - Serbia, Moldova & Ukraine
Support (awareness/trainings/advice/expertise)

Identification of economic competitive advantages by exploitation of the innovation potential

Building Entrepreneurial Discovery Process - engaging business, academia, research, policy makers and civil society in search of the smart specialisation priorities

Designing the smart specialisation strategy and setting the necessary governance structures
Why Smart Specialisation beyond the EU?

AN OPPORTUNITY to advance economic reforms:

• to kick-off and promote structural change and economic transformation.
• to advance the on-going economic reforms and to improve R&I policies
• to improve the governance of R&I strengthening existing institutional structures and developing interaction mechanisms
Why Smart Specialisation beyond the EU?

**AN OPPORTUNITY for businesses**

- to create transnational linkages and connections to global value chains and to get paths to new markets
- to gain from technology and knowledge transfer and transnational extensions contributing with new knowledge or capabilities
- access to additional funding sources and access to the EU programmes
Timeline of the JRC activities in support of the E&N countries

2013
- S3 trainings in Belgrade & Skopje (RS/MK)
- S3 for Danube seminar

2014
- Peer review in Novi Sad (RS)
- S3 for Danube workshop

2015
- JRC Annual EUSDR Event with particular attention to non-EU Danube partners

2016
- S3 design WS in Chisinau (MD)
- JRC S3 info day in Kiev (UA)

2017
- Launch JRC S3 pilot project for Serbia, Moldova, Ukraine
Recent & planned S3 pilot activities

**Preparatory**

- **2017 23-27 Jan**
  - S3 Training Seminar in Seville for pilot country officials in Seville

**Mapping**

- **2017 5-7 April**
  - Start S3 event in Chisinau
  - Launching S3 Mapping

- **2017 3-5 July**
  - Discussing first R&I mapping results

**EDP**

- **2017 5 Oct**
  - Presenting S3 mapping results for Moldova at SME conference in Chisinau
Mapping Economic, Innovation & Scientific Potentials of Moldova

Preliminary priority areas

**North**
- Agriculture and Food processing
  - Crop and animal production (A01)
  - Food products (C10)
- Textile, Apparel, Footwear and Leather goods
  - Wearing apparel (C141)
  - Electrical equipment (C27)

**South**
- Agriculture and Food processing
  - Crop and animal production (A01)
  - Grain mill products, starches and starch (C106)
  - Bakery and farinaceous products (C107)
  - Manufacture of beverages (C11) *incl. wine production*

**Gagauzia**
- Agriculture and Food processing
  - Crop and animal production (A01)
  - Grain mill products, starches and starch (C106)
  - Manufacture of beverages (C11) *incl. wine production*
  - Manufacture of wearing apparel (C14)

**Centre**
- Agriculture and Food processing
  - Crop and animal production (A01)
  - Forestry and logging (A02)
  - Processing and preserving of meat and production of meat (C101)
- Textile, Apparel, Footwear and Leather
  - Textiles (C13), Knitted and crocheted apparel (C143), Footwear (C152)
  - Basic pharmaceutical preparations (C21)
  - Other non-metallic mineral products (C23)

**Chisinau**
- ICT
  - Computer, electronic and optical products (C26), Telecommunications (J61), Computer programming, consultancy and related activities (J62)
  - Paper and paper products (C17)
  - Chemicals and chemical products (C20)
  - Machinery and equipment (C28)
Next Steps – Entrepreneurial Discovery and Priority Setting

**Analyse**

- **Operational committee**
  - Territorial intelligence unit
- **Creativity**
  - Societal challenges
  - Key enabling technologies
  - Technical and industrial opportunities
  - Entrepreneurial Discovery Process
  - Definition of potential specialisation domain
  - Current assets identification
  - Thematic workshops
- **Decision**
  - Regional Strategic Innovation Committee
  - Priorities and scenarios proposed
  - Debates
  - Filtering according to four criteria: choice, competitive advantage, critical mass, cooperation
  - Implementation by pilots for each specialisation domain
  - Priorities and scenarios adopted

**SWOT for priority domains**

- Regional current assets characterization
- Other regions benchmarking
- Innovation ecosystem overview
- Competitive advantages of the Centre region

**Next Steps**

- Entrepreneurial Discovery and Priority Setting

**Source:** Centre Region, Frédéric Pinna, 2017.
Key pre-conditions for the robust Smart Specialisation process

Political willingness, commitment and consensus towards the S3 based process perceiving it as a viable and necessary approach

A country should have sufficient institutional governance and coordination capacities to ensure interaction mechanisms among the relevant stakeholders in research, high education, private sector and public authorities.

Involvement of all stakeholder groups: business, research, academia, public authorities and society
Besides basic preconditions the countries should take into account:

**Apply broad innovation concept**

- S3 is not just a part of R&I policy it should be on the **top of strategic agenda** integrating all relevant policies relevant for the economic transformation!

- S3 embraces a **broad view of innovation**, supporting technological as well as practice-based and social innovation.

- Developing favourable framework conditions and **support for business innovation** would allow developing capacities to respond to higher technological challenges in the future.
Thank you for the attention!

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http://s3platform.jrc.ec.europa.eu