The Role of Smart Specialisation in the EU Enlargement and Neighbourhood Policies – Towards the Western Balkans Regional Economic Area

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R&I Strategies for Smart Specialisation (RIS3/S3) = Economic Transformation Agendas

aiming at using inspired R&I for producing competitive economic return and lasting welfare for the society!

NOT ONLY FOR THE BEST! Innovation is multi-dimensional & includes basic inventions or development of applications → at minimum RIS3 transform less-advanced regions into good followers! Regions need to seek the concentration of resources around the original / unique area of knowledge expertise!

Source: D.Foray 12/2011
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 – NOT a Neutral Policy!

= **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 in the EU Enlargement and Neighbourhood countries

- A unique opportunity to kick-off and promote structural change and growth.

- However, if designed and implemented in an imitative way by blind copying of the best practice developed for other contexts it can fail miserably.

- The key is to adapt S3 to the nature of innovation processes in the E&N countries.

- It should addresses country/region specific obstacles to improve R&I policy.
Report - The role of Smart Specialisation in the EU Enlargement and Neighbourhood Policies

Aims:

• to explore the possibilities how to apply S3 approach in the EU Enlargement and Neighbourhood countries
• identifying the major gaps and barriers
• provide recommendations for the capacity building actions

Work carried out:

• in the frame of Danube-INCO.NET project
• JRC S3 platform together with external experts
• Final version available at the S3P website: www.s3platform.jrc.ec.europa.eu & www.danube-inco.net/
Report - The Role of Smart Specialisation in the EU Enlargement and Neighbourhood Policies

Topics covered:

• The potential benefits of S3 approach for EU E&N countries
• Assessment of R&I systems in the EU E&N countries and their potential to apply S3 approach: opportunities and barriers
• RIS3 Assessment Wheel methodology used to visualise assessments in a comparative way
• Policy implications for the EU Enlargement and Neighbourhood Policies
• Recommendations for EU E&N countries regarding capacity building actions to address R&I challenges
• Includes country Case Studies – MK and UA
Report - The role of smart specialisation in the EU enlargement and neighbourhood policies

Countries addressed:

- **EU Enlargement**
  - **5 Western Balkan Countries:** Serbia, Montenegro, FYR Macedonia, Albania and Bosnia & Herzegovina

- **EU Neighbourhood**
  - **6 countries in Eastern Europe and South Caucasus – EU Eastern Partnership:** Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine
Some common features of E&N countries

- Mostly small economies (except UA) having limited manoeuvre for autonomous macroeconomic & industrial innovation policy limits structural changes
- Lacking investment in energy, transport infrastructure and vocational training
- Complex and unstable political situation (B&H, FYR Macedonia, Kosovo, Ukraine)
- Strong outmigration, high unemployment and unused human potential (WBC-5)
- Trade flows, FDI & integration in GVC hindered by regional conflicts & trade sanctions (WBC-5 & EaP countries)
- Low expenditure in R&D and a feeble business R&D sector & Innovation support structures / programmes in an early stage of development
- Low income levels

GDP per capita 2015:
EU countries vs. WBC-5 &
EU countries vs. EaP
Limited capabilities to invest in R&D (I)

Research and development expenditure (% of GDP), 2013 in WBC-5

<table>
<thead>
<tr>
<th>Country</th>
<th>R&amp;D Expenditure (% of GDP)</th>
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<tbody>
<tr>
<td>Germany</td>
<td>2.9</td>
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<tr>
<td>Austria</td>
<td>2.8</td>
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<tr>
<td>Slovenia</td>
<td>2.6</td>
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<tr>
<td>Italy</td>
<td>1.3</td>
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<tr>
<td>Croatia</td>
<td>0.8</td>
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<tr>
<td>Serbia</td>
<td>0.7</td>
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<td>FYR Macedonia</td>
<td>0.4</td>
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<tr>
<td>Montenegro</td>
<td>0.4</td>
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<tr>
<td>Bosnia and Herzegovina</td>
<td>0.3</td>
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<tr>
<td>Albania</td>
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- R&D investments are **comparable** to economies of their level of income and are either close or well below 1%
- Also, their R&D systems are largely **public driven** with very limited investments by the business sector
Limited capabilities to invest in R&D (II)

Research and development expenditure (% of GDP), in EaP countries
Limited capacity to generate new technological knowledge

<table>
<thead>
<tr>
<th>Country</th>
<th>Patent applications per million population residents, 2014</th>
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</thead>
<tbody>
<tr>
<td>Germany</td>
<td>591</td>
</tr>
<tr>
<td>Austria</td>
<td>243</td>
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<td>Slovenia</td>
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<td>Italy</td>
<td>141</td>
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<tr>
<td>Croatia</td>
<td>40</td>
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<tr>
<td>Serbia</td>
<td>28</td>
</tr>
<tr>
<td>Montenegro</td>
<td>21</td>
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<tr>
<td>Macedonia, FYR</td>
<td>20</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>11</td>
</tr>
<tr>
<td>Albania</td>
<td>3</td>
</tr>
</tbody>
</table>

Patent applications per million population residents, 2014
Country groups by R&I performance
based on R&D expenditures and on comparative development of their R&I policies

1) Belarus, Ukraine and Serbia - a relatively better developed R&I support
2) Armenia, Azerbaijan Georgia, Moldova, FYR Macedonia and Montenegro - in the stage of developing their R&I instruments
3) Bosnia&Herzegovina and Albania - still lack some fundamental elements for a properly functioning R&I policy

Gross expenditures for R&D in GDP and GDP per capita
Common features of the E&N countries:

- model of governance rooted in the idea of linear innovation which focuses on R&D innovation as the main source of innovation... although their drivers of growth are different when compared to the high income economies!

- E&N drivers of growth are related to physical investments, production capability, human capital and skills, openness and acquisition of foreign knowledge

- only to a smaller extent growth is related to their own R&D and technological capability!
Main Gaps and Obstacles regarding S3

- The E&N R&I systems will need major adaptations and fundamental policy making changes to meet the S3 requirements (especially to accommodate broad stakeholder involvement).

- A shift will be required for the S3 process to go beyond a sole focus on R&D and address the issue of sectorial technology upgrading, demand-led innovation, non-R&D drivers of growth, etc.

Main pre-conditions before launching the S3 process

- **Political willingness, commitment and consensus** towards the S3 based process needed to perceive 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.

- A country should build **HR, analytical and policy implementation capacities** in R&I embracing research, technological development and business innovation and **improve R&I policy development and implementation quality standards**.
The S3 in E&N countries:

Apply broad concept of innovation
- S3 not just a part of R&I policy but 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.

Develop inclusive governance
- The countries have to reinforce coordination mechanism between private & public sector in innovation activities. They should envisage best suited organisations in their national context to facilitate the S3 process.
- The entrepreneurial discovery process will be successful only if it is inclusive & interactive meaning that institutional governance and coordination capacities are in place.
Respect place based specialisation

- S3 is a placed based policy concept relying on the local innovation ecosystems. Therefore especially the larger countries have to consider regional diversity and specialisation allowing the more advanced regions to experiment with S3.

Policy mix beyond R&D measures

- The E&N countries have to broaden their policy mix spectrum by addressing demand-led business innovation, non R&D innovation, productivity and quality issues as well as technological upgrading.

- Individual E&N countries need to explore the feasible low-cost and administratively less demanding but effective policy mix measures.

Develop feedback mechanisms

- Monitoring & Evaluation capacities = critical self-reflection instruments of innovation policy and should be built as the key learning and correction mechanism rather than as an addendum to S3 and innovation policy.

- It is essential that countries gradually develop local expertise in this area though initially they will need an extensive international/COM assistance.
Build transnational links

- External support for Entrepreneurial Discovery Processes and studying of good practices from the EU may facilitate the S3 process importantly.

- Countries need to continue the integration to the EU R&I networks and find ways to get access to the latest good practices and knowledge in the EU (support schemes such as Horizon 2020 Policy Support Facility).

- E&N Countries could benefit from aligning their S3 priorities with the common areas of interest of the neighbouring EU partners from the Danube and Adriatic-Ionian EU macro-regions and active participation in the platforms provided by these macro-strategies.

... to sum up...

- Improving overall quality of R&I policy development result in better readiness for S3.

- S3 can be considered as an opportunity and a tool to improve R&I policies in the E&N.

- The application of S3 outside the EU has to follow the principles of differentiated approach respecting local context, expectations and interests.
Links to cluster policies in the work with E&N

Application of the European Cluster Observatory methodology: *Cluster Mapping of Related Sectors* – Pilot mapping of economic potential in Moldova

General methodology

<table>
<thead>
<tr>
<th>Emerging Industries</th>
<th>Moldova</th>
<th>Chisinau</th>
<th>North</th>
<th>Centre</th>
<th>South</th>
<th>Gagauzia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Packaging</td>
<td>1.2%</td>
<td>1.7%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Biopharmaceuticals</td>
<td>1.2%</td>
<td>1.3%</td>
<td>0.5%</td>
<td>1.7%</td>
<td>0.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Blue Growth Industries</td>
<td>5.6%</td>
<td>6.1%</td>
<td>4.7%</td>
<td>4.8%</td>
<td>5.1%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Creative Industries</td>
<td>5.9%</td>
<td>8.9%</td>
<td>1.5%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Digital Industries</td>
<td>3.3%</td>
<td>5.1%</td>
<td>1.1%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Environmental Industries</td>
<td>4.2%</td>
<td>4.2%</td>
<td>4.6%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Experience Industries</td>
<td>4.2%</td>
<td>5.9%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1.0%</td>
<td>4.2%</td>
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<tr>
<td>Logistical Services</td>
<td>4.1%</td>
<td>4.5%</td>
<td>3.3%</td>
<td>4.8%</td>
<td>3.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Medical Devices</td>
<td>2.1%</td>
<td>2.3%</td>
<td>4.3%</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.0%</td>
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<tr>
<td>Mobility Technologies</td>
<td>1.7%</td>
<td>1.6%</td>
<td>3.7%</td>
<td>0.8%</td>
<td>0.3%</td>
<td>0.1%</td>
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Source: European Cluster Panorama, 2014

Annual Growth, 2007-12
Links to cluster policies in the work with E&N

- S3P pilot project supporting RS, MD and UA 2016-18

- S3P plans to replicate the MD pilot in the WBC as a part of the preparation of their S3 strategies in collaboration with NEAR!

- Support to ME have started – awareness event in Podgorica 10/2017

- Serbia and Moldova should have their S3 strategies finished by the end of 2018.

The Calls for Cluster Partnerships for Smart Specialisation Investments will be very useful as an implementation tool if they are still available in 2018-19!
Thank you!

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