The European Commission’s science and knowledge service

Joint Research Centre
Smart Specialisation for Sustainable Development Goals

Localised STI Roadmaps for transformation and development

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The DNA of Smart Specialisation

Setting transformative agendas relying on **four main features**

- **Localisation**: focused on territorial specificities
- **Customisation**: no "one size fits all" – adapted to local context and institutions
- **Prioritisation**: targeting most promising potential for development/transformation
- **Mobilisation**: involving public and private stakeholders

Combining evidence-based and community-based knowledge

Sources: all pictures, European Commission; bottom right picture, osame, © Adobe Stock, 2018
The biggest experiment in innovation policy in the world...

- Scale
- Flexible framework
- Support structure
- Innovation in policy-making
- International partnerships

Data above for 2014-2020, new budget opening for 2021-2027
Outreach

**EU:** 120 strategies, 68 billion euro, 2014-2020

**EU Neighbourhood:** 10 countries in the process, 2 finished. Financing based on the progress

**Worldwide:** 9 countries, Support based on country-EC dialogue

Logo: S3 from Hunter, Australia
Key elements of Smart Specialisation approach

- Knowledge-based consensus
- Collaborative learning
- Evidence-informed discussion
- Systemic approach
- Focus on business needs
- Bottom-up
- Transparent
What is Smart Specialisation? - (S3)

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

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

- **Supporting 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-subnational); 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 specialisations based on territorial concentration of knowledge, competence and market potentials (dynamic)

S3 is NOT to be understood as a sector specialised or relative to other territories (passive)
Design principles for S3

1. ANALYSIS: discovery of the socio-economic and innovation engines of territorial 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 S3 design

**Step 1 – Analysis of territorial context/potential**

**Step 2 – Governance**

**Step 3 – Vision for the future**

**Step 4 – Identification of priorities**

**Step 5 – Policy mix**

**Step 6 – Monitoring & Evaluation**
S3 ecosystems: quadruple helix

- Businesses are best placed to lead the identification of new opportunities for growth.
- The process of discovery of the new niches/markets inspire public policies on innovation.

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, technology transfer offices, specialised research institutes.

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

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

NGOs and citizens’ initiatives related to societal challenges for which innovative solutions would be helpful, consumers associations, Talents! etc.

Civil society / Users
Mainstreaming the 17 SDGs across the EU policies and projects.
Sustainable Innovation: S3 priorities

<table>
<thead>
<tr>
<th>Policy objective</th>
<th>Priority level</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>National</td>
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<td>Bioeconomy</td>
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<td><strong>Eco-Innovations</strong></td>
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<td>High speed rail road system</td>
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<tr>
<td>Smart green &amp; integrated transport systems</td>
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<td>12</td>
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<tr>
<td>Sustainable agriculture</td>
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<td>9</td>
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<tr>
<td><strong>Sustainable energy and renewables</strong></td>
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<td>Sustainable land and water use</td>
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<td>11</td>
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<td><strong>Sustainable production and consumption</strong></td>
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<td>17</td>
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<tr>
<td>Waste management</td>
<td>53</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: JRC, S3 Thematic Platforms Team
S3 for SDGs: new work stream

Example: European Union regions and countries investing in priority domains such as cleaner environment, energy-efficient networks and low energy computing

Read more: http://s3platform.jrc.ec.europa.eu/home
Source: European Commission, Joint Research Centre
The **30 existing thematic partnerships** supported by the 3 thematic S3 platforms include innovation actors from **153 regions in 28 countries** (25 EU member states + Bosnia and Herzegovina, Norway and Turkey).
De- and Remanufacturing includes the set of technologies, tools and knowledge-based methods to recover, re-use and upgrade functions and materials from industrial waste and post-consumer high-tech products, under a new producer-centric Circular Economy perspective.

JRC contribution to the Global Pilot Programme on STI for SDGs

- Collecting and sharing experience on smart specialisation
- Support for Serbia as a pilot country
- Contributing to the Guidebook
- Development and testing of SDG-STI mapping methodology
- Mobilising EU support from different programmes
- Meetings and workshops: next one 5-6 March 2020
Looking at impacts:
Smart specialisation contributes to better quality of government

ICRG Indicator of Quality of Government
The Worldwide Governance Indicators (WGI) report on six broad dimensions of governance for over 215 countries and territories over the period 1996-2018: (I) Voice and Accountability; (II) Political Stability and Absence of Violence; (III) Government Effectiveness; (IV) Regulatory Quality; (V) Rule of Law; and (VI) Control of Corruption. The WGI are composite governance indicators based on over 30 underlying data sources.

Source: The QoG Institute, [https://qog.pol.gu.se/data/visualization-tools/map](https://qog.pol.gu.se/data/visualization-tools/map)
Looking at impacts: better government contributes to growth

Policy impacts of improving QOG in Ukraine,
% deviation from the baseline projections

Total EU support for Ukraine since 2014: EUR 13.8 billion, mostly focused on regulatory and governance reforms

Source: JRC, RHOMOLO Modelling Team
Looking at impacts:

Targeted support for research and innovation can be more effective for economic transformation

Source: JRC, RHOMOLO Modelling Team

Sectoral effects of IPA II investment for competitiveness and innovation in Albania
Thank you

Any questions?
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