Smart specialisation across Europe

Achieving better synergies between ESI Funds and other EU Funding Programmes

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Smart Specialization Platform:

- Since 2011 supporting Member States & Regions to design and implement their S3 by identifying a limited number of R&D and industrial activities with high innovation potential.
Main activities of the S3 Platform

- **Synergies ESIF-H2020**
  - "Stairway to excellence"

- **Targeted Support to regions**

- **Interactive web tools**

- **Value chains and alignment of innovation roadmaps**

- **RIS3 assessment and support to REGIO desks**

- **Guidance and analysis:**
  - RIS3 Guide;
  - Digital Agenda Toolbox;
  - S3 policy briefs

- **Trans-national focus**
  - Peer Reviews

- **Thematic focus on actors, process, learning and common priorities**

- **Focused approach on digital growth; energy; agro-food and industrial modernization (TSSP)**
ESIF programming 2014-20

- EUR 454 billion of ESIF + EUR 183 billion of national co-financing
- 456 national/regional OPs and 79 INTERREG cooperation programmes
- Concentration on 11 thematic objectives

Source: Final ESIF partnership agreements as of December 2015
Eye@RIS3

Research & Innovation Capabilities

Select

Business Areas & Target Market

Select

EU Priority

Select

Blue growth

Blue growth

Cultural & creative industries
Digital Agenda
KETs
Nature & biodiversity
Public health & security
Service innovation
Social innovation
Specific local policy priority
Sustainable innovation

EU Priority (Subcategory)

Select

Agriculture, forestry & fishing
Construction
Creative, cultural arts & entertainment
Energy production & distribution
Human health & social work activities
Information & communication technologies (ICT)
Manufacturing & industry
Mining & quarrying
Public administration, security & defence
Services
Tourism, restaurants & recreation
Transporting & storage
Water supply, sewerage, waste management & remediation activities
Wholesale & retail trade

Aquaculture
Blue renewable energy
Coastal & maritime tourism
Fisheries
Marine biotechnology
Offshore mining, oil & gas
Shipbuilding & ship repair
Transport & logistics (incl. highways of the seas)
Other S3 Tools

1. Benchmarking Regional Structure
2. Revealed Competitors and regional competitiveness scoreboard
3. ESIF – viewer: planned Investments under ESIF
4. R&I Regional Viewer
Thematic Smart Specialisation Platforms (TSSP)

Smart specialisation as a coordinating mechanism to align efforts

- **Strategic focus** on the "discovery process" of opportunities for co-investment in priority areas based on RIS3 analysis
- **Objective**: Support project investment pipe-lines leading to coordinated & joint investments
- **Governance**: joint initiative of (motivated) regions (e.g. Vanguard Initiative) supported by thematic policy EC DGs
- **Composition**: not only immediate competitors, but potential cooperation partners along value chains

Foster opportunities for regions/MS to team up around value-chains (Horizon2020, COSME and INTERREG Europe could support networking costs)
Facilitate funding access for resulting projects (e.g. EFSI, cooperation with EIAH, private investors, coordinating ESIF investments)

Building on existing clusters / thematically related EU level initiatives:

- Commission’s bio-economy strategy & action plan
- EEN sector group on agrofood
- Europe 2020 flagship: resource-efficient Europe
- EIP for Agricultural Productivity and Sustainability and its focus groups & EIP on Raw Materials
- JTI: Bio-based Industries (BBI)
- EIT-KIC Food4Future
Innovation for green economy

Involvement of Key Regional Actors

- Include key sectors such as energy efficiency & renewables, eco-innovation, resource efficiency, water, transport, bio-economy into RIS3
- Foster a green economy through innovation
  [Link](http://s3platform.jrc.ec.europa.eu/documents/10157/0/greengrowth.pdf)
- Other Thematic RIS3 Guides
Objectives of S2E

Stairway to Excellence (S2E) Initiative:
- Pilot Project funded by the European Parliament
- Initiated in October 2014 (Launching Conference in Prague)

Objectives:
- The provision of assistance to Member States and Regions to enhance the value of these two EU funding sources for R&I by promoting their combination (2015/2016: focus on EU13).
- Stimulating the early and effective implementation of national and regional Smart Specialisation Strategies.

Stakeholders Involvement:
- COM services (JRC, REGIO, RTD, ENER, CNECT, GROW) and other European Institutions (EP, CoR, EIT)
- Stakeholders' Representatives (EARTO, EBN, ERRIN, KICs)
- Regions and Member States (S3P network, S2E National events)
- FP / H2020 Network (NCP, regional networks, innovation agencies)
Stairway to Excellence (S2E) Initiative

Economic Rationale
- Structure of R&I Investment at the European Level (GBAORD) across public/private division and geographical composition
- New Role of ESIF in supporting broad intangibles investments
- Leverage effect of EC R&I funding by matching programmes with:
  - (apparently) different objectives – efficiency and effectiveness of R&I investments
  - different management of the programmes. ESIF supports catching-up MSs & regions more competitive in spatially blind & excellence-based H2020 calls.
  - different support to innovation life cycle. Beyond a stronger innovation generation capacity (*upstream activities*), there is room for increasing innovation absorption capacity (*downstream activities*) in the context of past R&I projects.

Legal Novelties
- Synergies under the new MFF 2014-2020 (COM Guide on Synergies, spring 2014)
Four cases of combined funding (COM Guide on Synergies):

1. **Joint or simultaneous funding**: Different funding sources within a single project. ESIF could also be used for some "complementary" funding (cost items eligible under ESIF but not under H2020).

2. **Sequential funding**: separate successive and legally/financially not linked projects with alternating H2020 or ESIF support. Sequential funding can go in both directions: capacity building (e.g. raising readiness to participate in H2020) and/or innovation exploitation (e.g. exploitation of H2020 results).

3. **Additional/parallel funding**: ESIF money is not directly linked to a H2020 project, but a regional/national authority decides to fund a project to enhance the impact of a H2020 R+I project or Erasmus+ or COSME in its region (i.e. skills development or capacity building or for amplifying the impact of Joint Technology Initiatives).

4. **Alternative funding**: ESIF money could be used for project proposals with a positive evaluation under H2020 or Erasmus+ that could not be funded due to a lack of H2020 funds under the call (i.e. SME instrument projects from a single country / projects submitted under the Fast Track to Innovation pilot scheme).
S2E Rationale & Case Studies

Horizon 2020
- Frontier research (ERC, FET)
- Collaborative research projects
- Individual and/or collaborative research projects
- Public-private partnerships
- Prizes
- Demonstration Pilots
- Procurement
- SME instruments
- Business Innovation
- Procurement
- Pilot lines
- Financial instruments

ESI Funds
- R&I Infrastructures
- Equipment
- Research Infrastructure initiatives (ESFRI)
- Training
- Skills development
- Business Advisory services
- Knowledge transfer
- Knowledge innovation communities
- ERA-Net, JPI, EUROSTARS...
- Marie Curie actions

National/Regional R&I systems
Targeting "Research Excellence"
Targeting "Innovation Excellence"
Capacity Building
Research & Development
Innovation
Market
National S2E Events

- A better understanding of the national innovation ecosystem
- Raising awareness of the actions needed to enable synergies
- Sharing experiences in combining different EU funds

The events are open to national and regional MAs, NCPs, national authorities in charge of RIS3, selected experts and representatives from business and research organisations.

- Bulgaria (July 2016)
- Romania (June 2016)
- Hungary (May 2016)
- Poland (April 2016)
- Slovenia (April 2016)
- Estonia (March 2016)
- Czech Republic (March 2016)
- Lithuania (October 2015)
- Malta (July 2015)
- Slovakia (June 2015)
- Latvia (April 2015)
- Croatia (March 2015)
General macro-economic indicators

<table>
<thead>
<tr>
<th></th>
<th>EU13*</th>
<th>EU15</th>
<th>EU28</th>
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<tbody>
<tr>
<td>Population</td>
<td>105 127 027</td>
<td>401 484 800</td>
<td>506 611 827</td>
</tr>
<tr>
<td>GDP - Euro per capita</td>
<td>10 417</td>
<td>29 800</td>
<td>25 700</td>
</tr>
<tr>
<td>GDP - Euro per capita in % of EU average</td>
<td>40.5</td>
<td>115.3</td>
<td>100</td>
</tr>
<tr>
<td>R&amp;D expenditure – Total (million Euro)</td>
<td>11 521.81</td>
<td>260 036.97</td>
<td>271 558.78</td>
</tr>
<tr>
<td>R&amp;D expenditure – Total [% of GDP]</td>
<td>1.05</td>
<td>2.09</td>
<td>2.01</td>
</tr>
<tr>
<td>R&amp;D expenditure – Business Enterprise Sector (BES) [% of GDP]</td>
<td>0.54</td>
<td>1.34</td>
<td>1.28</td>
</tr>
<tr>
<td>R&amp;D expenditure – Government Sector (GOV) [% of GDP]</td>
<td>0.23</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>R&amp;D expenditure – Higher Education Sector (HES) [% of GDP]</td>
<td>0.27</td>
<td>0.49</td>
<td>0.47</td>
</tr>
<tr>
<td>R&amp;D expenditure – Private non-Profit Sector (PnP) [% of GDP]</td>
<td>0.004</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>R&amp;D Personnel** – Total (% of active population)</td>
<td>0.62</td>
<td>1.25</td>
<td>1.12</td>
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<tr>
<td>R&amp;D Personnel – BES (% of active population)</td>
<td>0.25</td>
<td>0.69</td>
<td>0.60</td>
</tr>
<tr>
<td>R&amp;D Personnel – GOV (% of active population)</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>R&amp;D Personnel – HES (% of active population)</td>
<td>0.22</td>
<td>0.39</td>
<td>0.36</td>
</tr>
<tr>
<td>R&amp;D Personnel – PnP (% of active population)</td>
<td>0.002</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Unemployment Rate***</td>
<td>9.9</td>
<td>9.50</td>
<td>9.60</td>
</tr>
</tbody>
</table>

Source: Compiled and calculated by using Eurostat 2013

* EU13 aggregate not available in EUROSTAT
** R&D personnel refer to the number of full time equivalent R&D personnel.
***Unemployment uses latest available figures for 2013 age group 15 years and over.
R&D Investment - Poland 2014

- Total R&D funded by Bes: 17.2%
- Total R&D funded by Gov: 23.95%
- Total R&D funded by HEs: 39%
- Total R&D funded by PnP: 46.59%

R&D Investment - EU28 2014

- Total R&D funded by Bes: 12.12%
- Total R&D funded by Gov: 23.09%
- Total R&D funded by HEs: 45.2%
- Total R&D funded by PnP: 63.97%

R&D Funding - Poland 2014

- Total R&D funded Abroad: 2.2%
- Total R&D funded by Bes: 3.4%
- Total R&D funded by Gov: 45.2%
- Total R&D funded by HEs: 39%

Gross Capital Formation

- EU28: Flat line from 2000 to 2015
- Poland: Steady increase from 2000 to 2015
Regional R&D Intensity as a % of GDP
5 Country Groups

Source: JRC/IPTS
Funding Distribution of 7th FP and SFs

FP-based R&D Intensity as a % of GDP
5 Country Groups

SF-based R&D Intensity as a % of GDP
5 Country Groups

Source: JRC/IPTS
Stairway to excellence
Cohesion Policy and the Synergies with the Research and Innovation Funds

POLAND
Facts & Figures

S2E Facts and Figures

Poland – FP7 thematic profile

Evolution of the Share of EU FP contribution received

Framework programme 7 (% of FP7 budget dedicated to cooperation programme in the area)
(N): National smart specialisation area chosen

Research organisations: 32.7% (26.9% in FP7)
Private commercial: 21.3% (34.7% in FP7)
Higher education: 42.1% (43.5% in FP7)
R&I Regional Viewer

Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy
What is Stairway to Excellence

The "Cohesion Policy and the synergies with the research and development funds: the STAIRWAY TO EXCELLENCE (S2E)" project was launched in 2014 within the Smart Specialisation Platform (S3P).

The Stairway to Excellence (S2E) project aims to support EU13 regions and countries in developing and exploiting the synergies between European Structural and Investment Funds (ESIF), Horizon 2020 (H2020) and other EU funding programmes and:

- Assist them in closing the innovation gap, in order to promote excellence in all regions and EU countries;
- Stimulate the early and effective implementation of national and regional Smart Specialisation Strategies.

Activities of S2E

Background for the Project

National Events

National Events are being organized in EU13 Members States to:

- Ease understanding of national and regional innovation ecosystems
- Raise awareness to enable synergies between EU funding programmes
- Share experiences in combining Structural Funds and Framework Programme to improve excellence
- Draw lessons for the future and identify follow-up actions to enhance potential synergies

Country & Region Information

Quantitative and Qualitative information are produced for EU13 regions and countries:

- National and Regional Fact & Figures aim to draw the European profile of a country/region with statistical and financial information coming from the EU’s 7th Framework Programme and Structural Funds dedicated to research and innovation.
- S2E Country Reports provide further analysis on selected policy issues that affect optimal use and the combination of key EU funds for R&I and offer country-tailored policy suggestions aiming to tackle the weaknesses identified in the analysis.
Synergies examples

Synergies examples are provided in which SF/ ESIF and FP7/ H2020 funds have been combined in order to amplify the R&I investments and their impact, using different forms of innovation and competitiveness support, or carrying innovative ideas further along the innovation cycle or value chain to bring them to the market.

Instruments, Platforms & Concepts

Fiches are being made available on a selection of European instruments/platforms/concepts that can be considered as facilitators especially for "downstream activities", to exploit and diffuse results from earlier programming period (FP7) and current one (H2020), and as key elements in monitoring the implementation of synergies in their various forms.

Relevant Initiatives, Projects and Platforms

Beyond the Reference Documents (below) and Related Links (left), there are a number of Relevant Initiatives, Projects and Platforms for Cohesion Policy and the synergies with the research and development funds.

Reference Documents

We gather Reference Documents relevant to Cohesion Policy and the synergies with the research and development funds, including guidance for Policy-Makers, Implementing Bodies and Beneficiaries of EU Funds and instruments issued by the European Commission or other bodies.

FAQ

Frequently Asked Questions relate to practical application of the Guidance on synergies between ESIF, Horizon2020 and other research, innovation and competitiveness-related Union programmes.

A list of acronyms is also available.

Events

Publications
JOINT STATEMENT OF THE NATIONAL EVENT OF LATVIA
"The Synergies with Research and Innovation Funds"

organised by
European Commission, Joint Research Centre (Stairway to Excellence Initiative)
Latvian State Education Development Agency
15 April 2015, Riga-Latvia

Key Issue 2: The need for improved research collaboration with the Central and Western European countries (EU15).

Potential Actions: e.g. enhancing the network & learning (and adapting) from good practices across Europe.

Key Issue 5: Low rate of participation in international research collaboration
Key Issue 6: Long-term availability (sustainability) of ESIF

Potential Actions: e.g. establishment of incubation centres, enhanced autonomy for public universities, institute-dedicated budget, alignment of national funds and performance-based funding.
Main Issue:
- **Improving coordination / communication tools between main actors dealing with ESIF and S3 strategies**

Concrete Bottleneck:
- Lack of information circulation between stakeholders (silo effect)
- Need for open dialogue and mutual trust among different stakeholders
- Lack of collaborative governance and inefficient inter-institutional and transnational cooperation (e.g. fragmented research system)
- Lack of awareness about synergy (i.e. funding programmes) opportunities

Possible Actions:
- Better coordination of existing information channels & platforms
- More active roles for public bodies (e.g. promote EU programmes, establish specific offices etc.) together with more efficient incentive schemes
- Specific ministries (or agencies) to coordinate/lead collaboration
- Establishing a review / monitoring / evaluation system(s) (possibly more result-oriented than process-oriented)
- Learning/adapting from good practices
Main Issue:
- Active business involvement in the innovation ecosystem

Concrete Bottleneck:
- Lack of incentives for SMEs to participate in international research collaboration
- National funds (easily accessible) vs European funds (complicated with high coordination cost)
- Potential risk of multiple market distortions & rent-seeking behaviour

Possible Actions:
- Strategic involvement of Business in the Entrepreneurial Discovery Process
- Stabilise administrative and legislative framework to encourage business
- Facilitate SME-based R&D projects with supports of PROs and universities
- Measures allowing the primary use of ESIF for close-to-market projects
- Better Incentives for business (and/or researchers who are in collaboration with business) and risk reduction strategies via better awareness campaigns and technical support when feasible
Key Messages (3)

Other Main Issues:

- Brain drain
- Lack of strategic approach and prioritisation.
- Administrative burden & complicated bureaucracy
- Strategic Support for both capacity building (i.e. "upstream activities" towards research infrastructure, human resources, networking etc.) and commercial exploitation of results (i.e. "downstream activities")
- Lack of support to universities & industry for bridging activities.
- Lack of motivation (for PROs and SMEs) to participate in EU research programmes
- Lack of knowledge transfers among public and private bodies at national level and among EU MSs
Thank you!

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