Research and innovation strategies for smart specialization (RIS³)

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Overview:

Political Context

Research and Innovation strategies for smart (RIS3):

1. Why?
2. Who?
3. How?
4. When?
Political Context
Future of Cohesion Policy 2014-2020

The Commission's proposals of October 2011:

- Cohesion policy (ERDF, CF & ESF) dedicated to meeting the Europe 2020 objectives of smart, sustainable and inclusive growth
- Consistency with the national reform programmes
- Thematic concentration to maximize the impact of investment: focus on research and innovation in ERDF
- Conditionalities to ensure effective implementation, e.g. research and innovation strategies for smart specialisation (RIS3).

Common Strategic Framework of the Commission: coherence (ERDF, ESF, CF, EAFRD and EMFF); clarify synergies with Horizon 2020 etc.
A fair system for all EU regions (eligibility simulation)

GDP/capita*  ▪ < 75% of EU average  ▼ 75-90%  ▼ > 90%

*index EU27=100

3 categories of regions

- Less developed regions
- Transition regions
- More developed regions

Regional GDP figures: 2006-07-08
GNI figures: 2007-08-09
© EuroGeographics Association for the administrative boundaries
Concentration of ERDF investment resources to maximise the impact

- Research and Innovation
- SMEs competitiveness
- Energy efficiency and renewable energy

Flexibility (different regions present different needs)
Special arrangements for the previously convergence regions
Thematic objectives

1. Research and innovation
2. Information and Communication Technologies
3. Competitiveness of Small and Medium-Sized Enterprises (SME)
4. Shift to a low-carbon economy
5. Climate change adaptation and risk management and prevention
6. Environmental protection and resource efficiency
7. Sustainable transport and disposal of congestion on major network infrastructure
8. Employment and support for labour mobility
9. Social inclusion and poverty reduction
10. Education, skills and lifelong learning
11. Increased institutional capacity and effectiveness of public administration
ERDF investment priorities

1. Research, technological development and innovation:
   a) R&I infrastructure and capacity to develop excellence in R&I and promotion of centres of competence
   b) encouraging investment in R&I by enterprises, developing products and services, transfer of technology, social innovation, public service applications, stimulating demand, networking, clustering, open innovation, smart specialisation
   c) supporting research and applied technology, pilot lines, validation actions early products, advanced manufacturing capabilities, first production in key enabling technologies, diffusion of multipurpose technologies*.

*) ICT, photonics, nano- and bio-technologies, advanced materials, etc.
ERDF Investment Priorities

2. Improve the access, quality and use of ICT:
   a) diffusion of broadband and high speed networks
   b) development of ICT products and services, electronic commerce and increased demand for ICT
   c) strengthening the application of ICT for eGovernment, eLearning, eInclusion and eHealth

3. Improve SMEs competitiveness:
   a) promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new businesses
   b) development of new business models for SMEs, in particular for internationalisation
### Concentration of ERDF investments

<table>
<thead>
<tr>
<th>2014-2020</th>
<th>Total (€)</th>
<th>ERDF (% max)</th>
<th>ERDF (€ max)</th>
<th>(1)+(3) (in %)</th>
<th>(1)+(3) (in €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less developed</td>
<td>162.6</td>
<td>75</td>
<td>122.0</td>
<td>44</td>
<td>53.7</td>
</tr>
<tr>
<td>In transition</td>
<td>38.9</td>
<td>60</td>
<td>23.3</td>
<td>60</td>
<td>14.0</td>
</tr>
<tr>
<td>developed</td>
<td>53.1</td>
<td>48</td>
<td>25.5</td>
<td>60</td>
<td>15.3</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>254.6</td>
<td></td>
<td>170.8</td>
<td></td>
<td>83.0</td>
</tr>
</tbody>
</table>

Total Cohesion Policy = € 376 Billion, including ETC (€11.7B), Cohesion Fund (€68.7B), OMR-extra (€1B), Connecting EU Facility (€40B) and ESF (€84B, mini)
Why RIS3 and what are they?
Innovation and growth are linked.

Source: Mikel Navarro et al, Basque Competitiveness Institute 2010.
Innovation and (exit of) the crisis

[Graph showing correlation between R&D investment and GDP growth]
How enterprises see innovation

95% of respondents believe innovation is the main lever for a more competitive national economy

88% of respondents believe innovation is the best way to create jobs in their country

This faith is Global; these results are quite consistent from one country to another

See: GE Global Innnovation Barometer 2011: Interview of 1000 senior executives in 12 countries (December 2010 - January 2011)
Regional Innovation Scoreboard (2009)

See: http://www.proinno-europe.eu/page/regional-innovation-scoreboard
NB: The data do not include the impact of the crisis ...
Innovation for all regions?

Innovate in the 21st century: new actors, new rules …

- More than ever before, innovation needs to be localized to serve specific market needs: 76% agree
- More than ever before, SMEs and individuals can be as innovative as large companies: 75% agree
- The way companies will innovate in the 21st century is totally different than the way they have innovated in the past: 75% agree
- Today innovation is more driven by people's creativity than by high level scientific research: 69% agree
Problem:

- Lack of interaction between levels of governance and departments
- Strategies without external perspective – duplication
- Lack of or indifference to critical mass
- Measures only for R&I and capacity building and not for demand stimulation / market access
- Focus on fashionable themes / prestige projects
- Focus on industries and not on emerging sectors and services

See: Regional Innovation Monitor www.rim-europa.eu
What is Smart Specialisation?

- **Evidence-based** considering all assets and problems in a region, incl. External perspective / internal / global market (critical mass? Opportunities? excellence? cooperation? Value chains?)

- No top-down decision, but **dynamic / entrepreneurial discovery process** uniting key stakeholders around shared vision

- Mobilisation of investments and synergies **across different departments and governance levels** (EU-national-regional)

- **All forms of innovation** – no only technology driven

- **Differentiation**: SWOT analysis (all types of assets), competitive advantages, potential for excellence, opportunities

- **Concentration** of resources on priorities, problems and core needs (no sprinkler principle, no picking the winners, yes to catalytic investments)

- **Place-based economic transformation**: rejuvenating traditional sectors through higher value-added activities, cross-sectoral links, new market niches by sourcing-in and disseminating new technologies rather than re-inventing the wheel; exploiting new forms of innovation
What is a RIS3?

= Integrated agenda for place-based economic transformation, strengthening RTD innovation and increasing access to ICT and its use ≠ Operational Programme

To meet the ex-ante conditionality (ERDF and EAFRD):
✓ Based on SWOT analysis (including ICT)
✓ Concentrate resources on a limited set of priorities
✓ Encourages private investment in RTD
✓ Monitoring and review system
✓ Chapter on digital growth: balance of support to the demand and supply of ICT technologies; objectives "e-

+ derived from the NRPs: national level multi-annual plan for budgeting and prioritisation of investments linked to EU priorities.
Fact-sheet:

InfoRegio website:

Who should to prepare + participate in RIS3?
Who does NOT prepare your RIS3?

- Consultants, experts
- European Commission
- JASPERS
- World Bank
- OECD

... but they can accompany the process, provide contacts, data material, information, methodologies, assist with trans-national comparisons ...
Who prepares the RIS3?

The actors in an innovation system:
"knowledge triangle" & "triple / quadruple helix"

- Enterprises (SMEs, micro, large, industry & services, creative industries, ...), including key innovators
- Research centres, universities
- Cluster initiatives, business networks ...
- NGOs, consumers / users ...
- Regional development agencies, financial, incubators ...
- National authorities and /or regional (from different departments: economics, research, education, environment, social ...), Managing Authorities ...

You!
How to develop a RIS3?
RIS3 is a process ... of «entrepreneurial discovery»

What do they need?

With whom to cooperate?

Who are your customers / competitors?

Is there critical mass / excellence?

See: http://www.oecd.org/document/20/0,3746,en_2649_34413_44924372_1_1_1_1,00.html
What enterprises think of public innovation support ...

Only 1/3 of enterprises are satisfied with public support. The type of measures do not correspond to their needs.

What do they need?
- Money, but not only grants, also credits, guarantees, venture capital, etc.
- Clients, markets (domestic, global)
- Partners (development, value chains ...)
- Support for new forms of innovation (user-centred, combinations with services, ...)
- Quicker support and more tailor-made measures

See: DG ENTR (2009)
RIS3 is a process...

...to identify areas of specialisation / differentiation

But: How to say NO?

- Lack of critical mass / excellence
- Lack of future perspectives
- Lack of mobilisation/ a shared vision of the actors
- Consulting other regions ("peer reviews")
- Evaluation of the strategies / previous experimentation (check list) ...

Without reinventing the wheel!
Smart Specialisation Platform

Launched in 2011 to assist the MSs and regions in their development processes for RIS³:

- Based in the IPTS institute in Seville
- Managed by a team of representatives from the DGs of the European Commission (REGIO, EMPL, RTD, ENTR, EAC, INFSO, SANCO, CLIMA, AGRI and JRC)
- Supported by a group of high level experts, and representatives of networks and organisations

Services offered:

- Website: http://s3platform.jrc.ec.europa.eu/home
- Guidance on process for development of RIS3, analytical support
- Organises "peer-reviews" of national / regional strategies
- Conferences, working groups, trainings ...
50 registered regions are in the process of registering, 10 more are in the process of registering.

Register here to participate in the "peer-reviews", receive information and advice.

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

Regions registered on the Platform:

1. Niederösterreich
2. Oberösterreich
3. Región de Bruselas-Capitale
4. Vlaanderen
5. Wallonie
6. Jihomoravský
7. Kainuu
8. Ostrobotnia
9. Päijät-Häme
10. Alsace
11. Aquitaine
12. Centre
13. Corse
14. Guadeloupe
15. Guyane
16. La Réunion
17. Martinique
18. Nord - Pas de Calais
19. Sachsen
20. Weser-Ems
21. Emilia-Romagna
22. Marche
23. Piemonte
24. Puglia
25. Lombardia
26. Toscana
27. Friesland
28. Lubuskie
29. Województwo Podlaskie
30. Świętokrzyskie Voivodeship
31. Lubelskie Voivodeship
32. Açores
33. Vest
34. Andalucía
35. Aragon
36. Canarias
37. Castilla y León
38. Illes Balears
39. Madrid
40. Navarra
41. País Vasco
42. Region de Murcia
43. Skåne
44. Västerbotten
45. Västra Götaland
46. Cornwall
47. Kent
48. Northern Ireland
49. Northamptonshire
50. West Midlands
Steps to develop a RIS3

Step 1: Analysis of regional potential for innovation-driven differentiation

Step 2: RIS 3 design and governance – ensuring participation & ownership

Step 3: Elaboration of an overall vision for the future of the region

Step 4: Selection of priorities for RIS3 + definition of objectives

Step 5: Definition of coherent policy mix, roadmaps and action plan

Step 6: Integration of monitoring and evaluation mechanisms

Ver: Guía RIS3: http://s3platform.jrc.ec.europa.eu/s3pguide
Questions for RIS3 analysis

1. Is the strategy based on an appropriate stakeholder involvement? How does it support the entrepreneurial discovery process of testing possible new areas?

2. Is the strategy evidence-based? How have areas of strength and future activity been identified?

3. Does the strategy set innovation and knowledge-based development priorities? How have potential areas of future activity been identified? How does it support the upgrading of existing activities?

4. Does the strategy identify innovation and knowledge-based development priorities? How have potential areas of future activity been identified? How does it support the upgrading of existing activities?

5. Is the strategy outward looking and how does it promote critical mass/potential?

6. Does the strategy produce synergies between different policies and funding instruments? How does it align/leverage EU/national/regional policies to support upgrading in the identified areas of current and potential future strength?

7. Does the strategy set achievable goals, measure progress? How does it support a process of policy learning and adaptation?

8. Can the strategy be regarded as a regional research and innovation strategy for smart specialisation following the guidance provided by the EU Commission? Which advice can be given to improve the strategy?

Experts can be recommended to analyse the strategies and their development processes.

To register in the list of experts: [http://ec.europa.eu/regiona_l_policy/ten der/expression_en.cfm](http://ec.europa.eu/regiona_l_policy/ten der/expression_en.cfm)
Thematic guides

- Incubators
- Universities & regional development
- Broadband

Soon available:
- Clusters
- Social Innovation
- Green growth
- Entrepreneurial spirit
- Creativity
- Service innovation
- ...

Inspiration for innovation support:

- Oslo Manual (OECD)
- Community framework for State Aid to Research and Innovation
- Analysis of regional innovation [http://www.rim-europa.eu]
- EURADA • Directory of "No-Nonsense" Activities to Build S³-minded Regions; • All money is not the same [http://www.insme.org/files/3019]
When to start the process?
Now!
Calendar

- **July 2012**: Europe 2020: national reform programmes "investments in R&D"?
- Draft position papers per country (negotiating mandates)
- **Early 2013**: adoption of the Structural Funds regulations, Common Strategic Framework

+ **3 months** (2nd trimester 2013):
  - **Partnership contracts**: needs analysis; conditionalities (**RIS3**)
  - **Operational Programmes** including actions for **RIS3**

**Start the development of RIS3 now!**
Conclusions:

Research and Innovation strategies for smart specialisation:

Why? "Sprinkler principle" does not work and moreover: conditionality for ERDF 2014-2020

Who? You together with the innovation actors

How? Without reinventing the wheel

When? Now!
• **Proposals for the Structural Funds 2014-2020:**

• **RI S3 factsheet:**


• **RI S3 guide:** [http://s3platform.jrc.ec.europa.eu/s3pguide](http://s3platform.jrc.ec.europa.eu/s3pguide)

• "Regions for Economic Change" conference and "RegioStars 2012" award ceremony, 15 June, Brussels: