Research and innovation strategies for smart specialisation

(RIS³)

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Overview:

Context

Research and Innovation strategies for smart specialisation (RIS3):

1. Why?
2. What?
3. Who?
4. When?
5. How?

Commission support for RIS3
Context
RIS3 = ex ante conditionality for future Cohesion Policy investments

The Commission's proposals of October 2011:

- Designed to support the **Europe 2020** objectives of smart, sustainable and inclusive growth
- **Thematic concentration** of investment: focus on research and innovation, SME competitiveness and low-carbon economy in ERDF
- Focus on **impact** not absorption
- **Conditionalities** to ensure **effective implementation**, e.g. research and innovation strategies for smart specialisation are condition for CSF funding of RDT, innovation and ICT use
- Common Strategic Framework of the Commission for **coherence between ERDF, ESF, CF, EAFRD and EMFF** and **synergies with Horizon 2020, COSME** etc.
Thematic objectives of Cohesion Policy

1. Research and innovation
2. ICT access, use and quality
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 labour mobility
9. Social inclusion and poverty reduction
10. Education, skills and lifelong learning
11. Increased institutional capacity and effectiveness of public administration
Thematic objectives

1. Research and innovation
2. ICT access, use and quality
3. Competitiveness of Small and Medium-Sized Enterprises (SME)
4. Shift to a low-carbon economy (energy efficiency, new ...)
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 labour mobility (entrepreneurship)
9. Social inclusion and poverty reduction
10. Education, skills and lifelong learning
11. Increased institutional capacity and effectiveness of public administration
Concentration of ERDF investment resources to maximise the impact

- Research and Innovation
- Energy efficiency and renewable energy
- SMEs competitiveness
- Flexibility (different regions present different needs)
- Special arrangements for the previously convergence regions
- + possibly 4th: ICT

Developed regions and transition regions

Less developed regions

Cohesion Policy
A fair system for all EU regions (eligibility simulation)

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

*index EU27=100

European Council: €325 billion for 7 years:

3 categories of regions
- More developed regions
- Transition regions
- Less developed regions

Cohesion Policy

Regional GDP figures: 2006-07-08
GNI figures: 2007-08-09
© EuroGeographics Association for the administrative boundaries
Why RIS3?
Where does Croatia stand in terms of innovation?
Where does Croatia stand in terms of innovation?

- **low R&D expenditure** (0.7% of GDP), high portion from public sources (nearly 50%), significant regional disparities
- **SME sector technologically weak** (dominance of low-tech sectors; business services oriented towards low value added support); obstacles to their growth (bureaucracy, insufficient support to entrepreneurship, poor access to finance)
- **support** to modernisation and restructuring of enterprises underdeveloped
- **unexploited growth potential** in agriculture, fisheries and aquaculture
- insufficient coverage, accessibility and use of **ICT esp. in rural areas**
- **mismatch of labour market demand and supply**
- **higher education attainment** below the EU average (share of tertiary educated amongst 30-34 year olds: 24.5% compared to 34.6% in EU)
- **low lifelong learning** participation (2.2% - EU average is 8.2%)
"One-size-fits-all" is impossible!

... but every region has some asset that can make it special in terms of innovation...
Smart Specialisation: Why now?

- Search for **more efficient + effective regional development policies**, avoiding overlap, imitation, inward-looking, disregard for markets & demand, existing sectors only, inter-ministerial cleavages, wishful thinking ...

- Setting **innovation as priority for all regions** (Europe 2020) and improving innovation (strategy) process

- Better use of **scarce public resources**, aiming for synergies between EU, national/regional and private funds (PPPs)

- Driving **economic transformation**, focusing on regional profiles in global value chain

- **New academic insights and concepts** in the fields of growth, competitiveness and innovation
What is RIS3?
What is a RIS3?

“Research is the transformation of money into knowledge. Innovation is the transformation of knowledge into money.”

Geoffrey Nicholson, 3M

Source: Booze & Co: The Global Innovation 1000 Study 2012
What is a RIS3?

Possible under ERDF (and partly EAFRD):

**Research and technological development**
- Applied research, technology development, experimental development
- R&I infrastructure, centres of competence
- Business R&I: Product & service development, incl. ICT
- Technology transfer, etc.
  
  Build up excellence!

**All forms, fields & stages of innovation:**
- Demand driven / user-centred / social innovation
- Public service innovation, e-governance
- Networking, clustering, open innovation
- Pilot lines, proof-of-concept, advanced manufacturing capabilities, key enabling technologies
- E-commerce, e-learning, e-inclusion ...

+ ESF, legislative measures, tax incentives, etc.
What is a RIS3?

Medium to long term
Comprehensive:
Not only funding, but also legislative measures, governance, innovation system, business environment, etc.

Not only R&I projects and infrastructure, but capacity building: skills, entrepreneurial mind-set, infrastructures, innovation management skills ...

Mobilisation of investments and synergies across different departments and governance levels (EU-national-regional), publ.&private

Not only enabling R&I, but market uptake and demand perspective

Politically endorsed
What is a RIS3?

RIS3 Guide

Content:
▶ Step-by-step guide to strategy development
▶ Suggestions for delivery instruments
▶ Guidance for expert assessment

See RIS3 guide: http://s3platform.jrc.ec.europa.eu/s3pguide
What is Smart Specialisation?

= **fact-based**: all assets
= no top-down but **process + shared vision among innovation stakeholders, in particular business**
= **All forms of innovation** – not only technology and research driven
= **eco-systems**: creating environments for change
= Mobilisation of investments and synergies **across different departments and governance levels** (EU-national-regional)
= **source-in** knowledge, & technologies

= Be different!
= **competitive advantages**, potential for excellence, opportunities
= **global perspective** on potential competitive advantage + potential for cooperation, global value chains
= **Concentration** of resources on priorities, problems and core needs
= accumulation of **critical mass**
= not necessarily focus on a single sector, but **cross-fertilisations**, rejuvenating traditional sectors through higher value-added activities

= **Integrated agenda for place-based economic transformation**
What is the relation between RIS3 and operational programmes?
Hypothetical Structure of a RIS3

Fields of "specialisation" ... or rather differentiation, diversification, critical mass, future potential ...

**RIS3**

KETs for SMEs:
- Tech. transfer & audits, demonstrators, pilots

**Fields of "specialisation"**
- Forestry technologies for mountain areas
- Tourism: innovative health and sport services
- Renewable energy: bio-mass
- Bio-Economy: New use of cellulose

**Skills & innovation capacities:**
- Entrepreneurial, innovation management, creative ...
RIS3 ≠ Operational Programme

Hypothetical example 1: more developed region

Implementation drawing on a variety of sources ...

Legislation

RIS3

Technologies

Tourism:

BioEEconomy:

Renewable energy:

Regional funding

National funding

Cohesion Policy
RIS3 ≠ Operational Programme

Hypothetical example 2: less developed region

Implementation drawing mainly on Structural Funds...

Skills & innovation capacities: entrepreneurial, innovation management, creative ...

KETs for SMEs:
- Tech transfer & audits, demonstrators, pilots
- Renewable energy: biogas
- Bio-Economy: new use of cellulose
- Tourism: innovative health and sport services
- Forestry technologies for mountain areas
- BioEEconomy: new use of cellulose

RIS3

Legislation

Operational Programme

ERDF

ESF

EAFRD
RIS3 ≠ Operational Programme

Legislation

RIS3

KETs for SMEs:
- Tech. transfer & audits, demonstrators, pilots

Forestry Technologies for mountain areas

Tourism: innovative health and sport services

Renewable Energy: bioEmass

Bio-Economy: new use of cellulose

Skills & innovation capacities: entrepreneurial, innovation management, creative...

ERDF + ESF + Cohesion fund

Hypothetical example 3: multi-fund OP
Hypothetical example 4:

RIS3 ≠ Operational Programme

RIS3

KETs for SMEs:
Tech. transfer & audits, demonstrators, pilots

Forestry Technologies for mountain areas
Tourism: innovative health and sport services
Renewable energy: bio-mass
Bio-Economy: New use of cellulose

Skills & innovation capacities: entrepreneurial, innovation management, creative...
Who develops my 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 ...
RIS3 is a process ... of «entrepreneurial discovery»

- Is there critical mass / excellence?
- What do enterprises need?
- With whom to cooperate?
- Who are your customers / competitors?
How will the compliance with the RIS3 ex-ante conditionality be checked?
Ex-ante conditionality fulfilment criteria

For investment priority 1:  
**Strengthening RTD and innovation**

National or regional research and innovation strategic policy framework for smart specialisation is in place that:

- is based on a **SWOT or similar** analysis to concentrate resources on a **limited set of research and innovation priorities**;
- outlines measures to **stimulate private RTD investment**;
- contains a **monitoring and review** mechanism.

- A **framework outlining available budgetary resources** for R&I has been adopted.

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... In addition for research infrastructures:

An **indicative multi-annual plan for budgeting and prioritization** of investments linked to **EU priorities**, **and, where appropriate**, the European Strategy Forum on Research Infrastructures - ESFRI has been adopted.
Ex-ante conditionality fulfilment criteria

For investment priority 2:

**Enhancing use and quality of ICT**

A *strategic policy framework* for digital growth *for instance in* the RIS3 to stimulate demand for affordable, good quality and interoperable ICT-enabled private and public services and increase uptake by citizens, including vulnerable groups, businesses and public administrations including cross border initiatives in place that contains:

– budgeting and prioritisation of actions through a *SWOT or similar analysis* consistent with the *Scoreboard of the Digital Agenda for Europe*;

– an analyses of *balancing support for demand and supply* of ICT should have been conducted;

– *measurable targets for outcomes* *indicators to measure progress* of interventions in the field of *digital literacy, skills, e-inclusion, e-accessibility, and e-health within the limits of Article 168 TFEU* which are aligned with existing relevant sectoral national or regional strategies.

– assessment of needs to reinforce ICT capacity-building.
When does my RIS3 have to be ready?
Timeline

Partnership Agreement

- General regulation adopted
- Partnership Agreement Submitted (MS)
- Observations by EC
- Partnership Agreement Adoption

Country / region specific Operational programmes

- All OPs incl. Ex-ante eval. (except ETC) (MS)
- Observations by EC
- OP Adoption (EC)

European Territorial Cooperation ("INTERREG") programmes

- ETC OPs (MS)
- Observations by EC
- ETC OP Adoption (EC)

Timeline:

General regulation adopted: Max 4 months
Partnership Agreement Submitted (MS): Max 3 months
Observations by EC: Max 1 month
Partnership Agreement Adoption: Max 3 months
All OPs incl. Ex-ante eval. (except ETC) (MS): Max 9 months
Observations by EC: Max 3 months
OP Adoption (EC): Max 3 months
ETC OPs (MS): Max 3 months
Observations by EC: Max 3 months
ETC OP Adoption (EC): Max 3 months

Cohesion Policy
How to develop a RIS3?
Steps to develop a RIS3

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

Step 2: 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
How does the Commission support the RIS3 development?
Support for RIS3 development:

- **S3Platform:**
  - Website
  - Guidance on process for development of RIS3
  - Analytical support
  - Organises "peer-reviews" of national / regional strategies
  - Conferences, working groups, trainings ...

- **Informal expert reviews**

- **Data material**, e.g. Regional Innovation Scoreboard, ERAWATCH, RIM, European Cluster Observatory, Digital Agenda Scoreboard, SME performance review, SSH studies, IPTS studies, etc.

- **Good practices**: e.g. RegioStars, European Entrepreneurship Awards ...

- **CoR, OECD, World Bank, JASPERS, EURADA, ERRIN, EBN**, etc.

See: [http://s3platform.jrc.ec.europa.eu/home](http://s3platform.jrc.ec.europa.eu/home)
Commission support for RIS3:

S3 Platform:
- peer-reviews
- analysis & data
- training
- communication

★ RIS3 policy events:
- national
- trans-national

✓ 14 RIS3 kick-off events for Member States
✓ 4 trans-national RIS3 events
Commission support for RIS3:

S3Platform:
- peer-reviews
- analysis & data
- training
- communication

★ RIS3 policy events:
- national
- trans-national

Expert analysis and support
- national
- regional
- thematic
- process
- ....

So far 58 REGIO contracts for informal RIS3 assessment:
14 national and 37 regional strategies
Thematic guides

- Incubators
- Universities & regional development
- Broadband
- Service innovation
- Creative industries
- Green growth
- Entrepreneurial mind-set

Soon available:
- Clusters
- Social Innovation
- SME Innovation
- Public procurement for innovation
- Horizon2020, COSME – CSF funds

See: http://s3platform.jrc.ec.europa.eu/guides
Other inspiration for innovation support

- **Oslo Manual** (OECD) [https://community.oecd.org/community/smartspecialisation](https://community.oecd.org/community/smartspecialisation)
- **Community framework for State Aid to Research and Innovation**
- **Regional Innovation Monitor:** Analysis of regional innovation policies and profiles [http://www.rim-europa.eu](http://www.rim-europa.eu)
- **EURADA • Directory of "No-Nonsense" Activities to Build S³-minded Regions;**
  - *All money is not the same*, etc. [http://www.insme.org/files/3019](http://www.insme.org/files/3019)
- **RegioStars awards & policy-learning database:**
- **European Cluster Observatory** [http://www.clusterobservatory.eu/index.html](http://www.clusterobservatory.eu/index.html)
Innovation in the agro-food sector

Reflection paper: Agricultural knowledge and innovation systems in transition (SCAR, March 2012)

Information