

Research and innovation strategies for smart specialization and smart and sustainable development

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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

- ✓ Deliver the **Europe 2020** strategy objectives of smart, sustainable and inclusive growth (*"the power of the purse"*)
- ✓ Strengthen **partnership**
- ✓ **Simplification**
- ✓ Focus on **results**, not spending
- ✓ **Maximise the impact** of EU funding (*"do more with less"*)

Future of Cohesion Policy 2014-2020

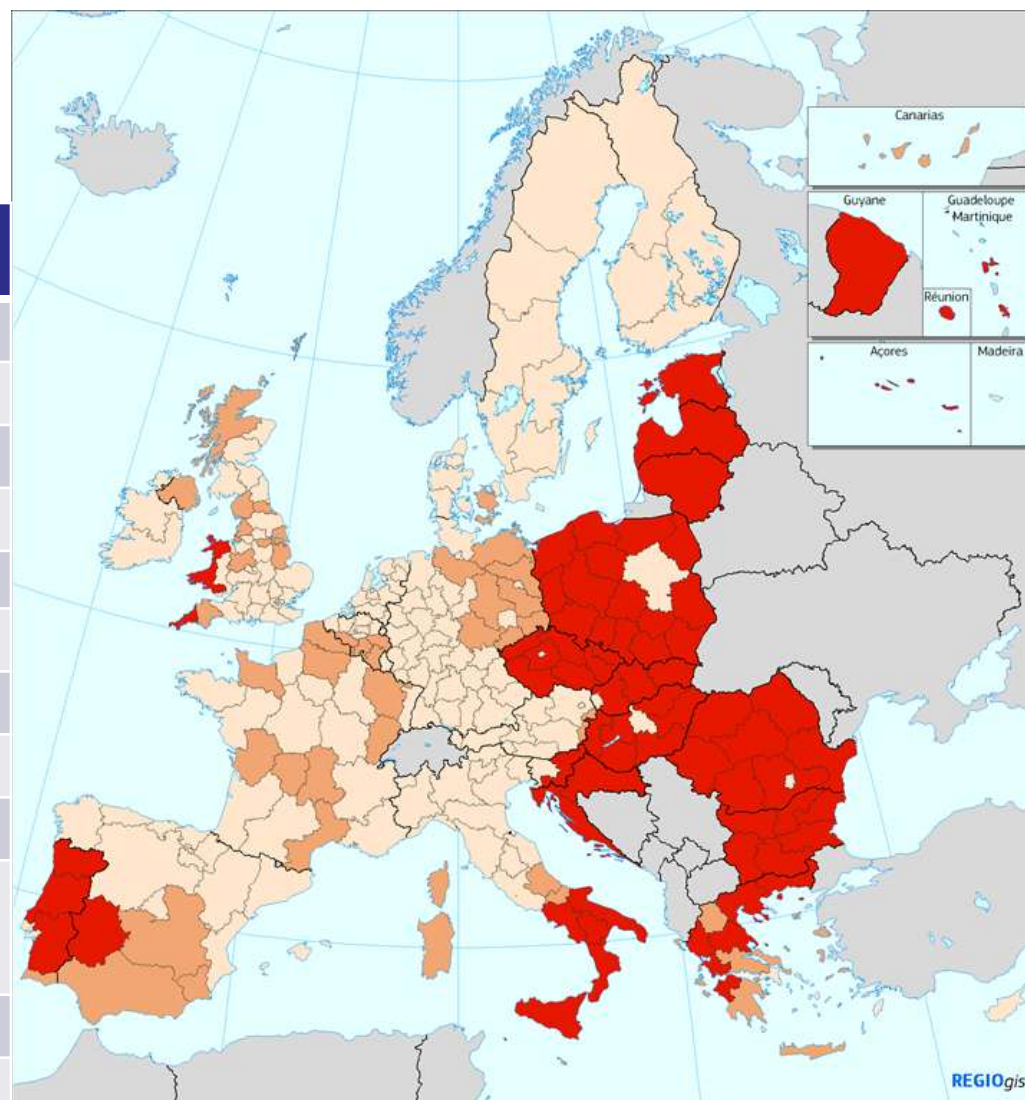
Consequences:

1. **Thematic concentration** to maximise the impact of investments
2. **Conditionalities** and strengthened partnership to ensure effective implementation
3. **Common Strategic Framework:** coherence across funds (ERDF, ESF, CF, EAFRD, EMFF); clarify synergies with Horizon 2020 etc. (see modified COM proposal for Common Provisions Regulation of 11 Sept 2012: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012PC0496:EN:NOT>)
4. **Novelties** – compared to current regulations

Eligibility map 2014-20

- Less developed region (GDP/head: less than 75%)
- Transition regions (GDP/head between 75% and 90%)
- More developed region (GDP/head: more than 90%)

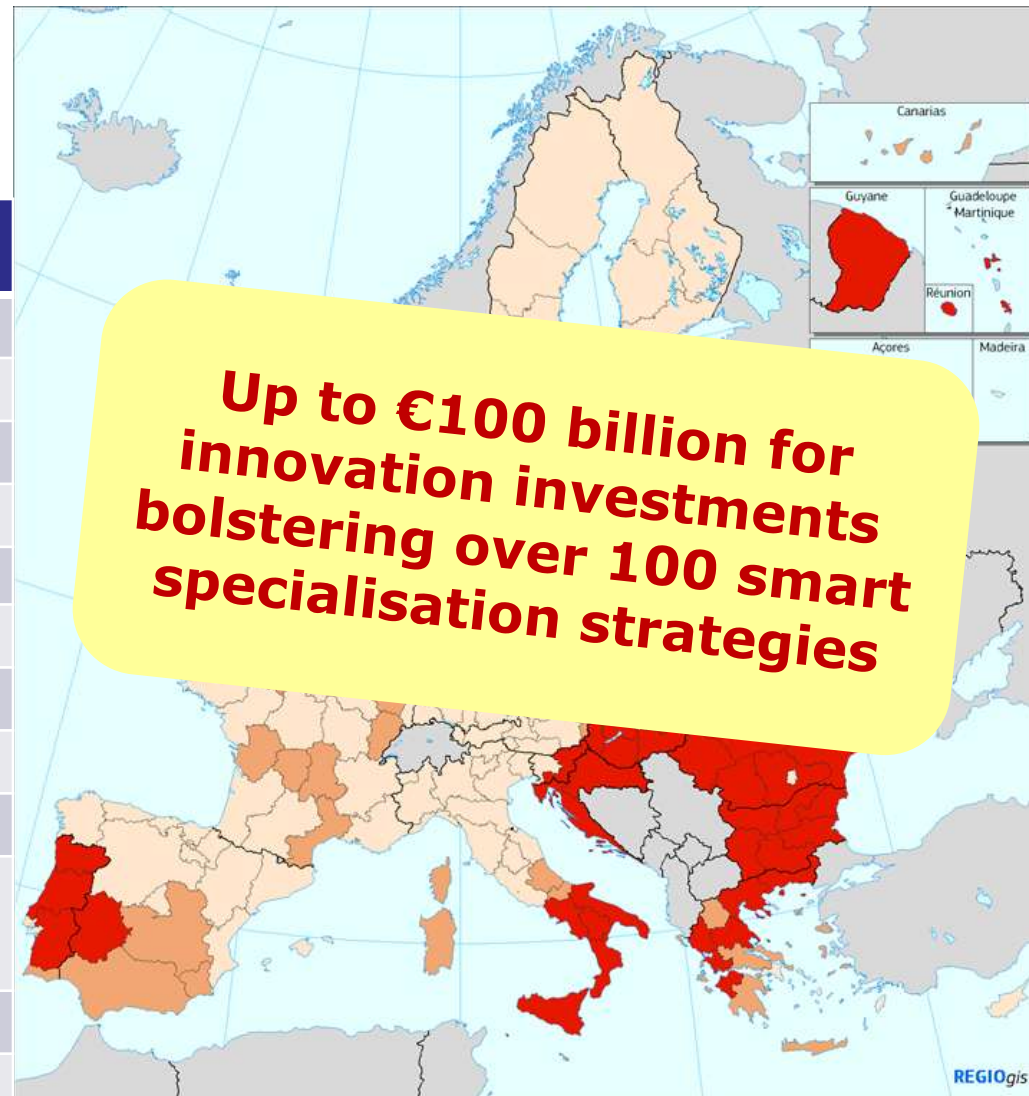
| | Billion EUR |
|--|----------------|
| Less developed regions | 164.3 |
| Transition regions | 31.7 |
| More developed regions | 49.5 |
| Cohesion Fund | 66.4 |
| European territorial cooperation | 8.9 |
| <i>Of which</i> | |
| <i>Cross border cooperation</i> | 6.6 |
| <i>Transnational cooperation</i> | 1.8 |
| <i>Interregional cooperation</i> | 0.5 |
| Outermost regions and northern sparsely populated regions | 1.4 |
| Youth Employment initiative | 3.0 |
| TOTAL | 325.1 |



Eligibility map 2014-20

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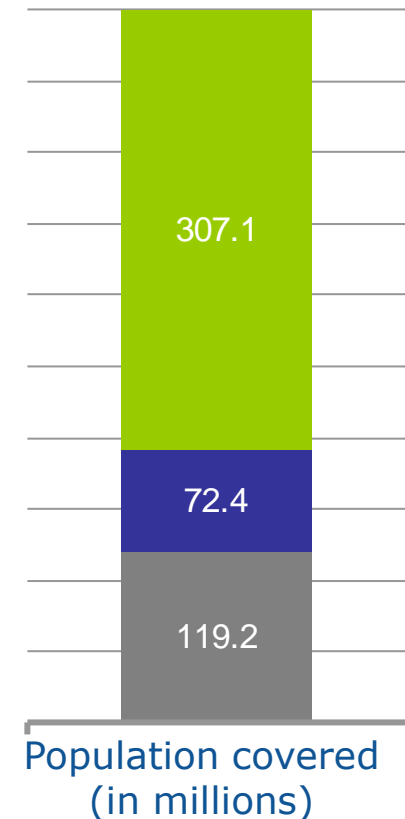
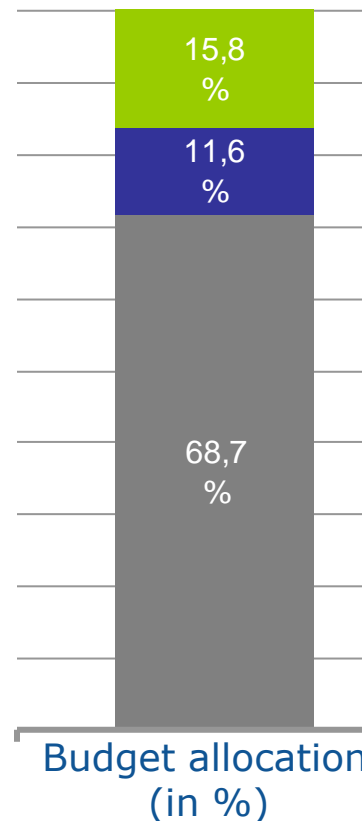


How will funding be allocated?

Less developed regions/MS
 Transition regions
 More developed regions

| | |
|--|--------------|
| Cohesion Fund ¹ | 68.7 |
| Less developed regions | 162.6 |
| Transition regions | 38.9 |
| More developed regions | 53.1 |
| European Territorial Cooperation | 11.7 |
| Outermost regions and sparsely populated areas | 0.9 |
| Total | 336.0 |

¹ €10 billion from the Cohesion Fund will be allocated to the Connecting Europe Facility



1. Impact of the MFF decisions

... and evermore need to concentrate on investments on themes that enable smart & sustainable growth



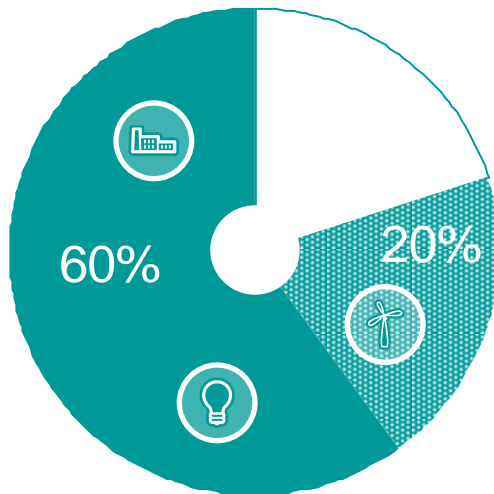
Research and Innovation



Energy efficiency and renewable energy



SMEs competitiveness



Developed regions and
transition regions



Less developed regions

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

Over 100 smart specialisation strategies (all MS are expected to use TO1, some with several RIS³)

... mobilising up to €100 billion from ESI Funds (Horizon2020: up to €72 billion)

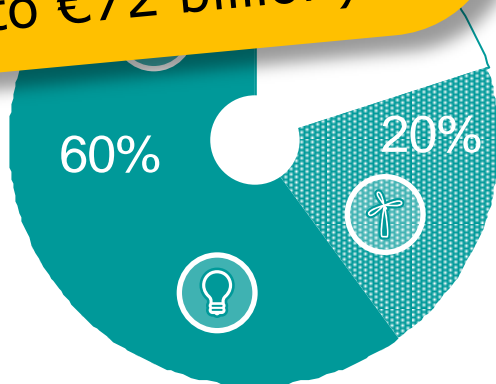


3 do we expect?

Energy efficiency and renewable energy

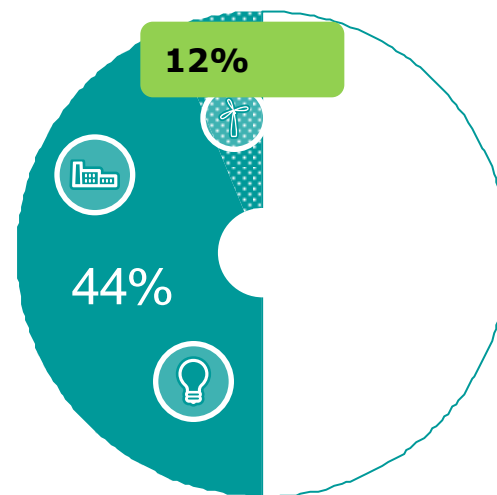
ICT access, quality and use

Concentration on "two or more of the thematic objectives 1, 2, 3 and 4"



Developed regions and

Transition regions: 60 % concentration (incl. 15% for energy/renewables)



Less developed regions

Probable modifications as resulting from the "trilogue"

different regions present different needs)
... for the previously convergence regions

What does the RIS3 ex-ante conditionality apply to?

Investment priorities under TO:

1. Research and innovation

2. ICT use and quality

ICT access
(broadband)

3. Competitiveness of SMEs

Ex ante conditionalities:

Smart specialisation strategies

Digital growth strategy can be independent, but recommended to integrate in RIS3

Next Generation Access / Network Plan

Small Business Act

~~Late payment Directive~~

What does the RIS³ ex-ante conditionality apply to?

Investment priorities under TO:

1. Research and innovation

2. ICT use (*ICT based innovation & "digital growth"*)

ICT access and quality
(broadband)

3. Competitiveness of SMEs

Ex ante conditionalities:

No ex ante cond. for EAFRD, but RIS3 may include EAFRD investments in R&I

Smart specialisation strategies

Digital growth strategy can be independent, but for sake of coherence it is **recommended to integrate it in RIS3**

**Next Generation Access
Network Plan**

... and why not ESF and EMFF investments in R&I ?

Small Business Act

Recommended:

Include in the RIS3 envisaged support to SME innovation

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

To what does the RIS3 apply?

ERDF investment priority 1

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..*



To what does the RIS3 apply?

Possibly to ERDF investment priority 2 b&c

2. Improve the access, quality and use of ICT:

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

State of play in "trilogue" between Commission, Council and European Parliament:

Investment Priorities 1 - 3

Investment Priority 1

result of trilogue in July'13

1. strengthening research, technological development and innovation through:

(a) enhancing research and innovation (R&I) **infrastructure and capacities** to develop R&I excellence and promoting centres of competence, **in particular those of European interest**;

(b) promoting **business investment** in innovation and research, and developing **links and synergies between enterprises, R&D centres and higher education**, **in particular product and service development, technology transfer, social innovation, eco-innovation**, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in Key Enabling Technologies and diffusion of general purpose technologies,

Investment Priority 2 **result of trilogue in July**

enhancing access to and use and quality of ICT through:

- (a) extending broadband deployment and the rollout of high-speed networks and supporting the adoption of emerging technologies and networks for the digital economy;
- (b) developing ICT products and services, e-commerce and enhancing demand for ICT;
- (c) strengthening ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health;

Investment Priority 3 **result of trilogue in July '13**

enhancing the competitiveness of SMEs through:

- (a) promoting entrepreneurship, in particular by **facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators;**
- (b) developing and implementing new business models for SMEs, in particular **for internationalisation;**
- (c) supporting the creation and the extension of advanced capacities for product and service development;
- (d) supporting the **capacity of SMEs to engage in growth in regional, national and international markets, and in innovation processes;**

To what does the RIS3 apply?

EAFRD union priorities for innovation

- UP 1: fostering **knowledge transfer and innovation in agriculture, forestry, and rural areas with a focus on the following areas:**
 - (a) fostering innovation and the knowledge base in rural areas;
 - (b) **strengthening the links between agriculture and forestry and research and innovation**
- [UP 6c: enhancing **accessibility to, use and quality of information and communication technologies (ICT) in rural areas**]

What else is innovation relevant, but not dependent on RIS3?

ERDF:

2. ICT access: a diffusion of broadband and high speed networks

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

4. shift towards a low-carbon economy in all sectors

5. promoting climate change adaptation, risk prevention and management

6. protecting environment and promoting resource efficiency

7. promoting sustainable transport ...

8.a development of business incubators and investment support for **self-employment** and **business creation**



What else is innovation relevant, but not dependent on RIS3?

ERDF and ESF

- enhancing **institutional capacity** and an **efficient public administration** (ERDF IP 11 & ESF IP 1d) **TRANSVERSAL PRIORITY**

ESF Article 3

(1): (a) Promoting employment and supporting labour mobility through: **Self-employment, entrepreneurship and business creation; ...**

(b) Investing in **education, skills and life-long learning**

(2): contribute to the other thematic objectives listed in [CPR], primarily by:

(b) Enhancing accessibility, use and quality of ICT, through the development of **digital literacy**, investment in **e-inclusion, e-skills** and related **entrepreneurial skills**;

(c) Strengthening research, technological development and innovation, through the development of **post-graduate studies, the training of researchers, networking activities and partnerships between higher education institutions, research and technological centres and enterprises**;

(d) Enhancing the competitiveness of small and medium-sized enterprises, through promoting the **adaptability of enterprises and workers** and increased **investment in human capital**.

ESF Article 9: Social innovation

1. The ESF shall promote social innovation **within all areas** falling under the scope of the ESF, ... in particular with the aim of **testing and scaling up innovative solutions to address social needs**.

3. The Commission shall facilitate **capacity building for social innovation**, in particular through supporting mutual learning, establishing networks, and disseminating good practices and methodologies.

Important novelties for R&I in proposed Regulations (1)

- **SMEs only! Large Firms only in connection with R&TD+i, + IP4 (energy efficiency/renewables) and IP2b (large firms together with SMEs on ICT use).**
Art.3 (ERDF Reg.): *"The ERDF shall support productive investment, which contributes to creating and safeguarding sustainable jobs, through direct aid to investment in SMEs"*
- **No physical infrastructures in rich regions: Art. 3 (ERDF Reg.):** *"In more developed regions, the ERDF shall not support investments in infrastructure providing basic services to citizens in the areas of environment, transport, and Next Generation Access (NGA)/ICT".*
Attention: under discussion in Council

Important novelties for R&I in proposed Regulations (2)

- **Promoting internationalisation: Art. 60.2 (b) (CPR Reg.):** if the operation is for the benefit of the programme area: *"The total amount allocated under the programme to operations located outside the programme area [but within the Union] does not exceed 10% [EP: min. 1%; Council: max.15%] of the support from the ERDF, CF and EMFF (3% [Council: 5%] for EAFRD)"*
- **...and interregional collaboration: Art. 87.2 (c) v (CPR Reg.):** "An Operational Programme shall set out the contribution to the integrated approach for territorial development set out in the Partnership Agreement, including the arrangements for [EP: cross-border] interregional and transnational actions with beneficiaries located **in at least one other Member State**"

Important novelties for R&I in proposed Regulations (2)

- **Promoting internationalisation: Art. 60.2 (b) (CPR Reg.):** if the operation is for the benefit of the programme area: *"the total amount allocated under the OP to operations located outside the OP area (but within the EU) does not exceed 15 % of the support from the ERDF, Cohesion Fund and EMFF at the level of the priority, or 5 % of the support from the EAFRD at the level of the programme"*
- **...and interregional collaboration: Art. 87.3 (d) CPR Reg.):** The Operational Programme shall describe *"the arrangements for interregional and transnational actions, within the operational programmes, with beneficiaries located in at least one other Member State"*

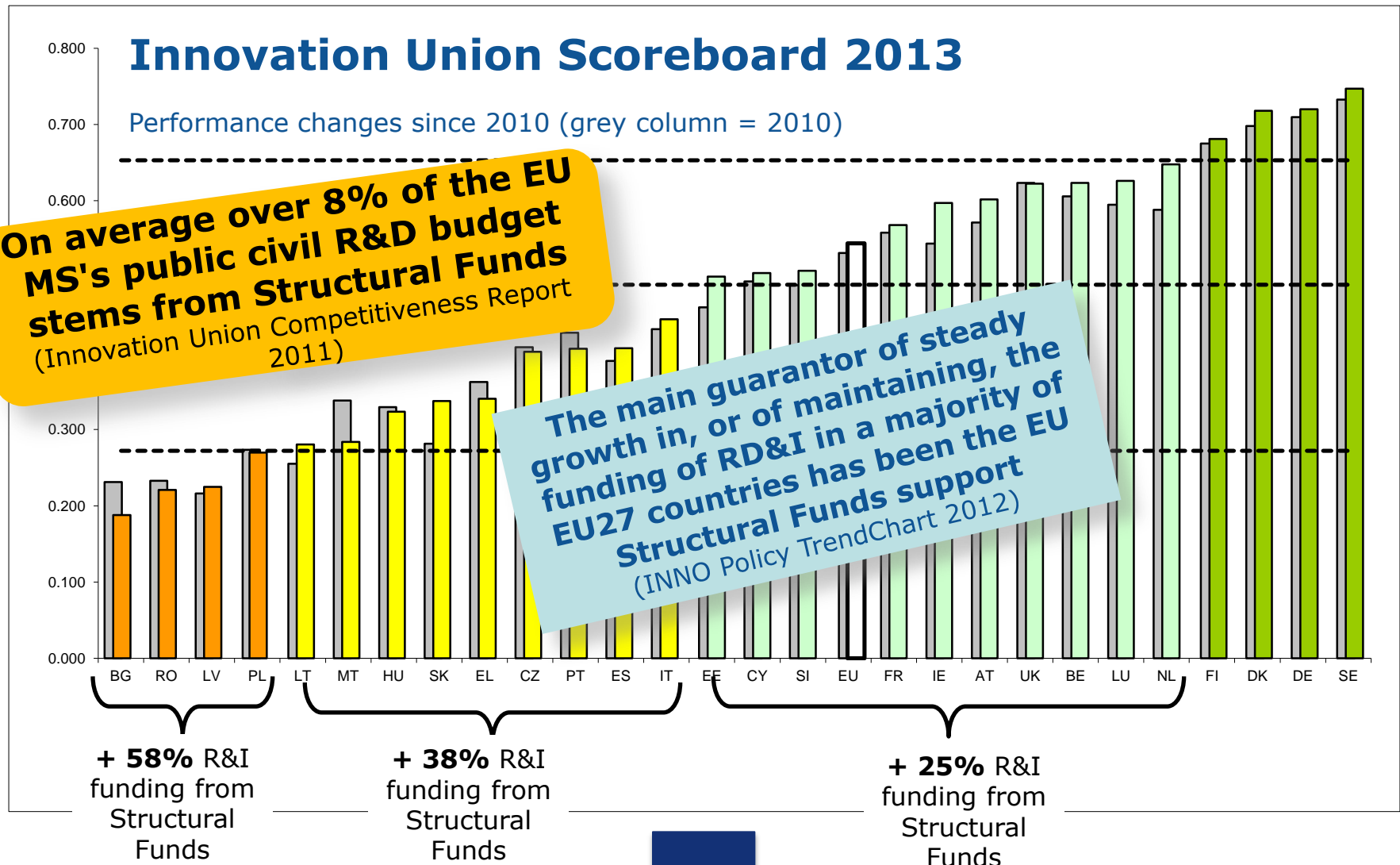
Important novelties for R&I in proposed Regulations (3)

- **Innovative actions** in the field of sustainable urban development: CPR Art 84(7) "0,2% of the ERDF resources for the Investment for growth and jobs goal shall be allocated to innovative actions at the initiative of the Commission in the area of sustainable urban development" (*not under shared management; urban development platform to facilitate networking among cities with IA*)
- **Social innovation**: **ESF** Art. 9: all areas falling under the scope of the ESF; Member States shall identify themes for social innovation; Commission shall facilitate capacity building for social innovation + in ERDF investment priority 1(b)
- **Innovation skills and capacities**: e.g. graduate and student placements (innovation assistants), training, innovation management (IPR, etc.), training for researchers: up to 10% ESF-type actions under a priority axis (Art 88(2) CPR).

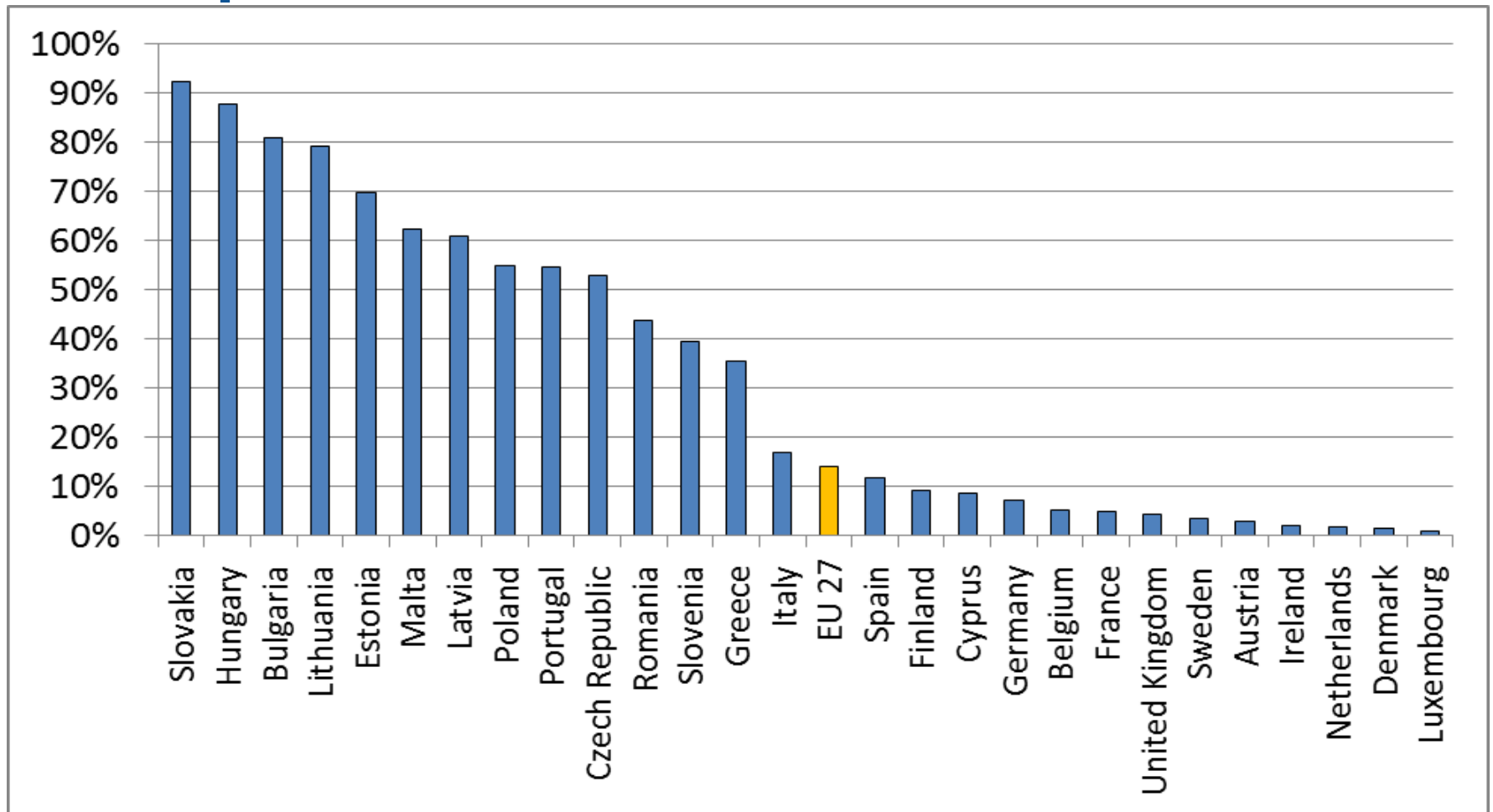
Important novelties for R&I in proposed Regulations (4)

- **Common Strategic Framework**: translate the objectives and targets of smart, sustainable and inclusive growth into key actions for the ERDF, the CF, the ESF, the EAFRD and the EMFF which will ensure an integrated use of the CSF Funds to deliver common objectives (*CPR Art. 10-12*)
But: not via delegated act, as proposed by COM, but as part of CSF regulations See COM proposals for **key actions** in SWD(2012) 61 final
http://ec.europa.eu/regional_policy/sources/docoffic/working/strategic_framework/csf_part2_en.pdf
- **Open to synergies with Horizon 2020**: Art. 55.8 (CPR Reg.): "An operation may receive support from one or more CSF Funds and from other Union instruments, provided that the expenditure item included in a request for payment for reimbursement by one of the CSF Funds does not receive support from another Fund or Union instrument,..."

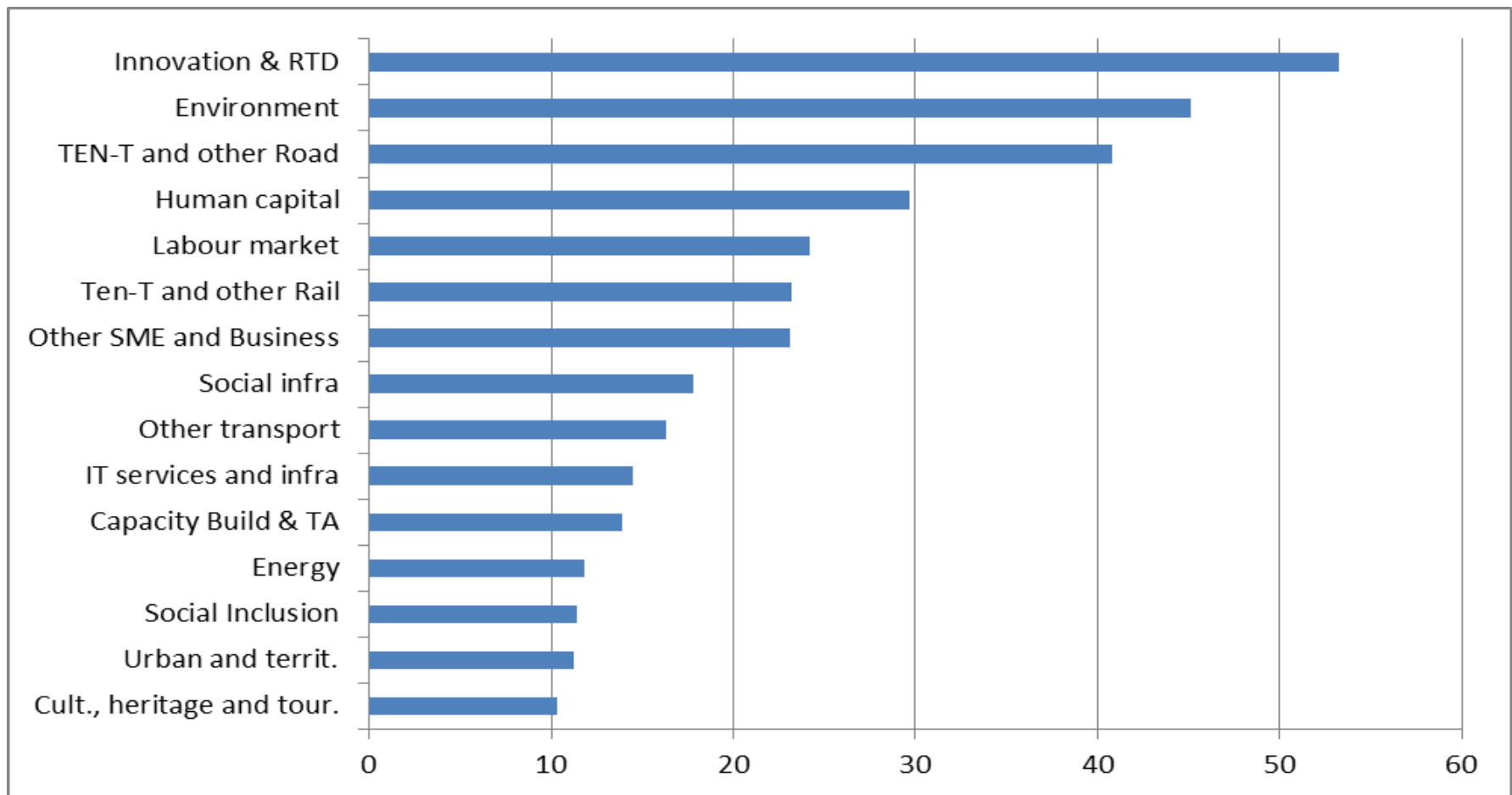
Impact of the MFF decisions ... importance of ESIF



Cohesion policy and national co-financing as % of total public investment (average 2010-2012=



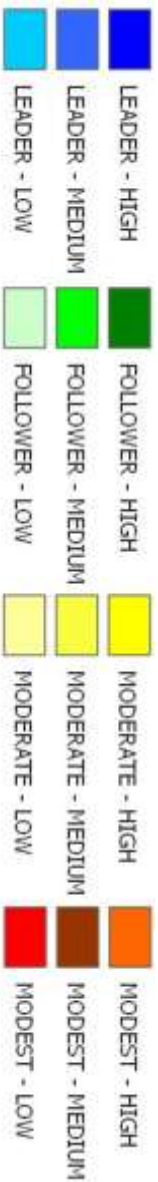
Cohesion policy - planned investment by major investment fields - 2007-2013 (in € billions)



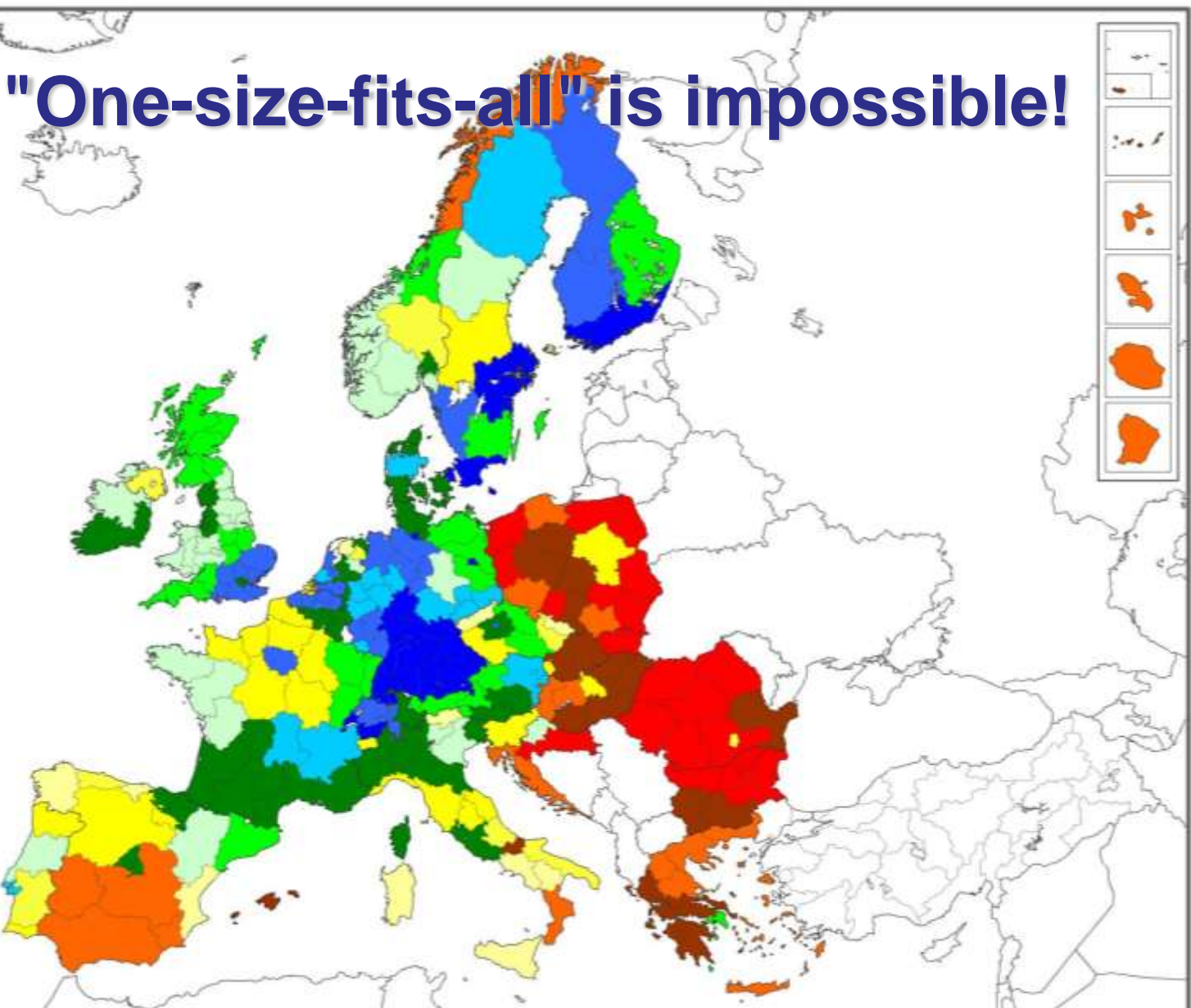


Regional Innovation Scoreboard 2012

http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/index_en.htm

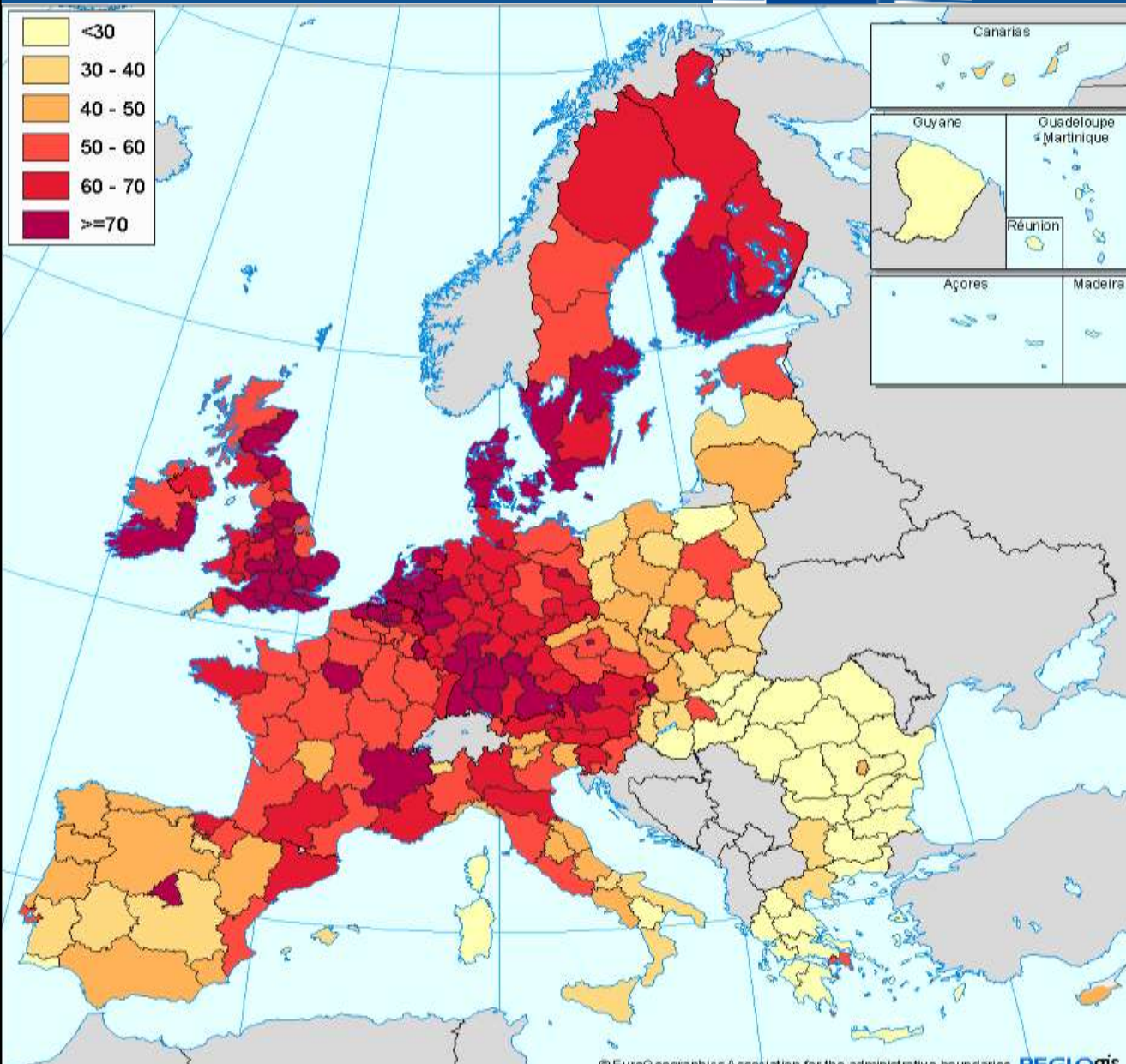


"One-size-fits-all" is impossible!



Competitiveness Index, 2010

Index - Values range between 0 (low) and 100 (high)



Competitiveness

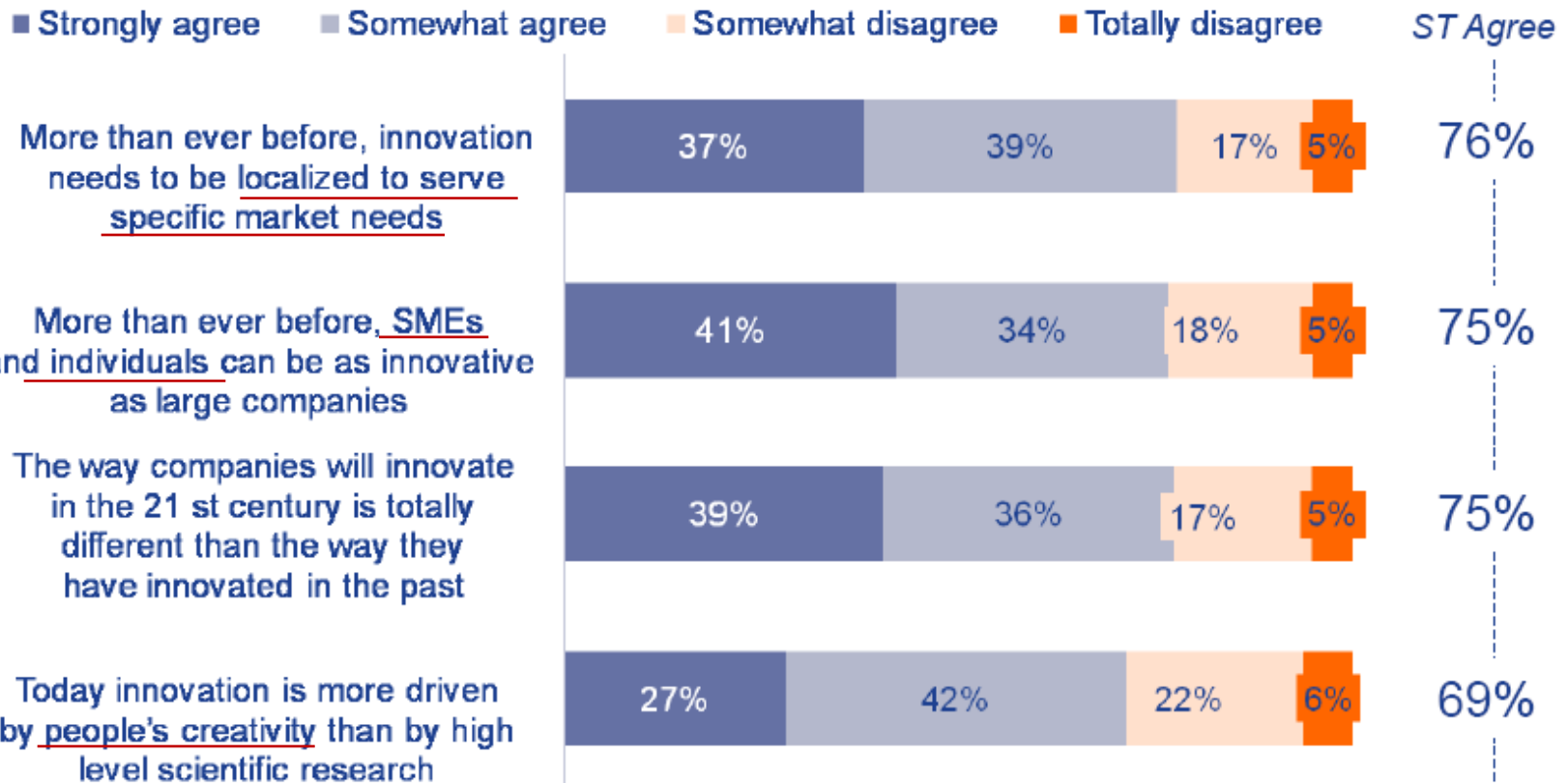
NB: The data do not include the impact of the crisis ...



Innovation for all regions?



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





Lessons from a Decade of Innovation Policy Analysis

- **Countries should be encouraged to develop their own specific policy models to respond to country specific challenges.** Promotion of “best practises” should be avoided or measures should be carefully customized.
- **Funding remains concentrated on science and technological research** with a trend to implement thematic programmes and more competition for the RDI support. Support for non-technological innovations is still limited.
- **Innovation policies to foster industry-science collaboration seem to be effective,** however such collaboration first requires building RDI capacities both in universities and businesses, otherwise supporting collaborative approaches may be premature. This might the case for instance in modest or moderate innovators where efforts should rather be put on upgrading their respective capacities, instead of aiming at collaboration in the first place.
- **Mixed impact of grants to support business innovation.** The analysis tends to indicate that grants are less effective than loans and other financial instruments, or than support to start-ups or venture capital to raise the innovation performance of SMEs. However it cannot draw any strong conclusion in this respect.

Smart Specialisation: Why now?

- Search for **more efficient + effective regional development policies**, avoiding overlap and imitation
- 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 (PPP)
- Driving **economic transformation**, focusing on regional profiles in global value
- **New academic insights and concepts** in the fields of growth, competitiveness and clusters

What implies the ex-ante conditionality?

Existence of a **national or regional research and innovation strategy** (*strategic policy framework*) **for smart specialisation** (incl. digital growth chapter, if relevant)

Fulfilment will be checked along the following criteria:

- ✓ Based on **SWOT** (*or similar*) **analysis**
- ✓ **Concentrate resources** on a **limited set of priorities**
- ✓ Outlines measures to **stimulate private RTD investment**
- ✓ **Monitoring** (and review) system (incl. digital targets)
- ✓ If chapter on **digital growth**: balance of support to the demand and supply of ICT; objectives for "e-"; digital growth management capacity
- ✓ framework outlining **available budgetary resources** for R&I

If investments in R&I infrastructures:

- ✓ *indicative* multi-annual plan for budgeting and prioritization of investments linked to EU priorities, and, *where appropriate*, ESFRI

Answering some of your Questions

- **What are the key elements for accepting a strategy as "RIS3"? (2)**

- **Measures to stimulate private investment** = *merely political target setting or copying from other regions proved to be unfit! Better: conceived in consultation with enterprises + tested in socio-economic context of the region / MS.*
- **Monitoring mechanism** = *keep ball rolling from entrepreneurial discovery process of strategy design to check progress towards objectives; be prepared for adjustments if necessary given the fast technological and market developments*
- **Outline of available R&I budgetary resources** = *just enough detail to allow seeing where OP investments fit in / are needed + **indicative multi-annual budget plan** if R&I infrastructure and capacity building foreseen = important to foresee ESFRI implementation and meeting of other EU priorities and needs*

From UMBRIA

- **What are the methods and timing for the approval and sharing of R&I regional Strategy for S3?**

The soonest the better. Although this is part of the formal discussion, it is better to have it submitted to the Commission before the formal OP submission to the EC to avoid delays and to allow informal discussions

From MORAVIA-Silesia

- **What 's the optimal approach to incorporate social innovations in RIS3 – in form of technological solutions or in form of new social services, etc?**

Both are possible! The optimal will be the outcome of the entrepreneurial discovery process and the developed policy-mix

FAQ

- What if **we got it wrong** in terms of priorities or policy mix?

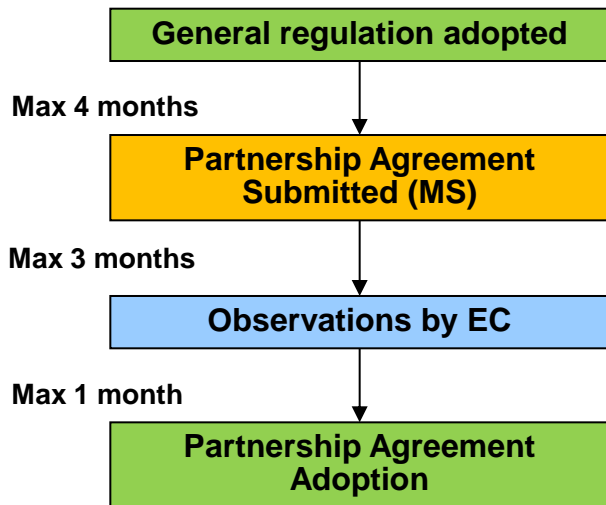
Relaunch entrepreneurial discovery process to revise RIS3, re-programme OP if necessary, use experimentation to limit risk

How may RIS3 for Greece???

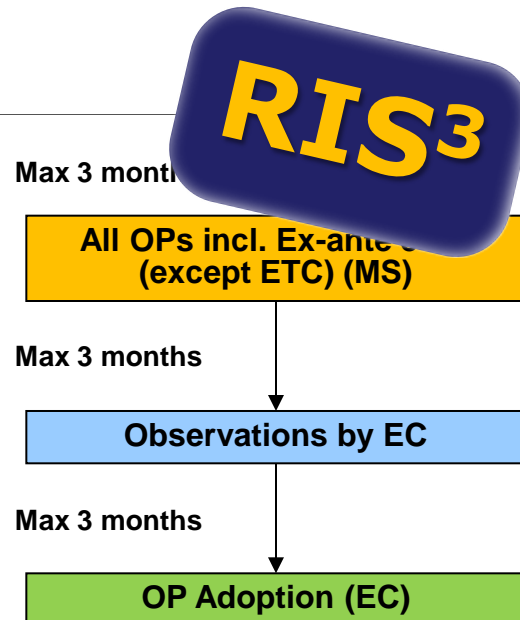


By when do the RIS3 need to be ready?

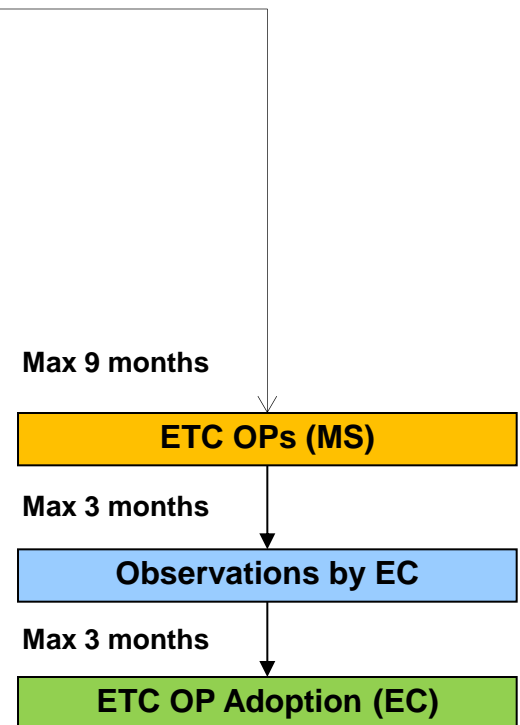
Partnership Agreement



Country / region specific Operational programmes



European Territorial Cooperation ("INTERREG") programmes



"Up-stream"

"Down-stream"

Horizon 2020

Frontier research (ERC, FET)

Excellent R&I
Demonstration
Pilots

KETs
Business Innovation (IP1+3)

PPPs
prizes
procurement

ESI Funds

R&I Infrastructures and
Equipment (IP1)

ESFRI

Skills

Business Advisory
services

KETs (IP1)

SME instrument

ERA-Net, JP, EUREKA ...

Marie Curie

KICs

"Staircase to Excellence"

National/Regional
R&I systems

"Research Excellence"

Hopefully also excellence, but
"Innovation Excellence"

Capacity Building

Research & Development

Innovation

Market

IP = Investment Priorities under the R&I thematic objective of the ERDF Regulation

Thank you for your attention