

# Joint Research Centre

the European Commission's in-house science service

*Serving society  
Stimulating innovation  
Supporting legislation*

## S3 Platform support for the enlargement and neighbourhood countries

Dr. Ales Gnamus

Smart Specialisation Platform

**Kyiv, 15 September 2016**

[www.ec.europa.eu/jrc](http://www.ec.europa.eu/jrc)

# Design principles for RIS3

- 1. ANALYSIS:** discovery of the socio-economic and innovation engines of regional 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



*RIS3 Guide of the European Commission*

With contributions of D. Foray, P. McCann, J. Goddard, K. Morgan, C. Nauwelaers

Available on the **S3 Platform webpage**  
<http://s3platform.jrc.ec.europa.eu>

# What is Smart Specialisation?

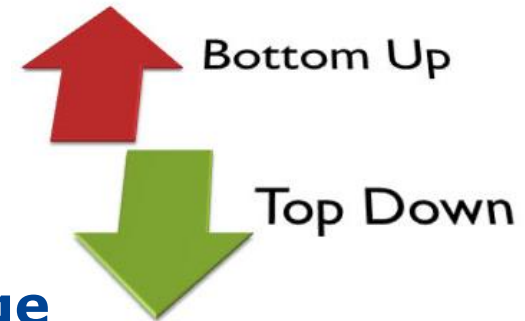
- = **fact-based**: all assets + capabilities + **bottlenecks** in a region, incl. external perspective, cooperation potential, global value chains
- = no top-down decision but **dynamic entrepreneurial discovery process** uniting key stakeholders around shared vision
- = **all forms of innovation**, 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-regional); 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

# What's new in the S3 approach?



## S3 is NOT a "Neutral" Policy

- S3 does not act only through horizontal measures that cut across the whole economy
- It requires policy makers to take risks associated with the selection of a limited number of activities to support



## Choices Based on Entrepreneurial Knowledge

- No central and omniscient planner
- Policy makers will rely on and exploit the fundamental knowledge of the local entrepreneurs
- Interactive process of knowledge exchange and creation: the *entrepreneurial discovery process (EDP)*

*Hausmann & Rodrik 2003; Foray & Goenaga 2013; Foray 2015*

# Centrality of Entrepreneurial Discovery Process

## Priority-Identification Process:

- 1. Entrepreneurial actors in abroad sense:** all actors potentially holding some type of entrepreneurial knowledge, from businesses to research institutions and also public administration!
- 2. Interactive process where *different* actors can meet:** become aware of potential for synergies and complementarities, or explore experimental ideas
- 3. Shielded environment where actors can disclose information:** both virtual and physical space
- 4. Non-hierarchical process:** stakeholders in this process stand on the same foot as the administration

*from the S3 Platform experience*



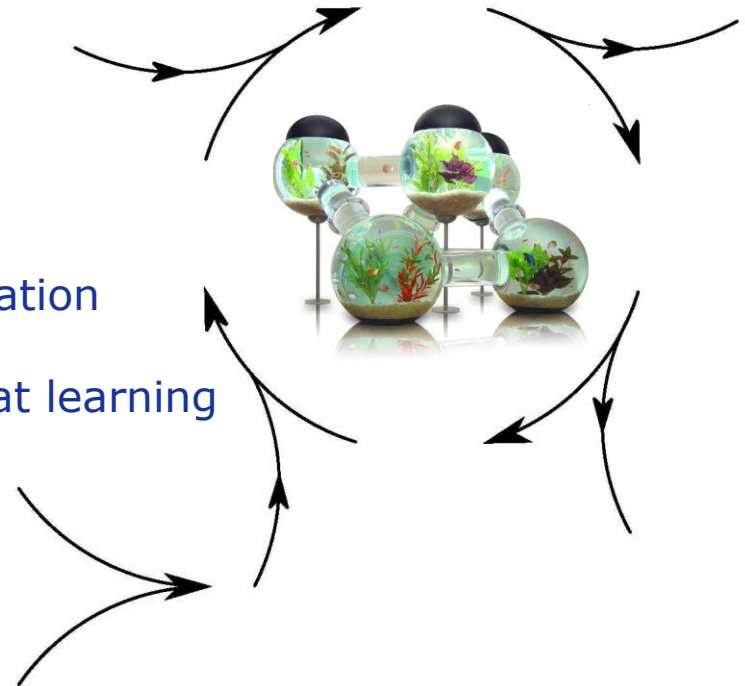
Public authority will prioritise activities which:

- Have critical mass of entrepreneurial resources and capabilities
- Show commitment of stakeholders / entrepreneurs
- Are suitable to realize the strategic goals/meet the needs and challenges of the local economy and society

# RIS3 Sustainable Policy Cycle

## Result Orientation + Sustainability and Replicability of Policy Cycles

- a. **Permanent stakeholder fora**, stable engagement process based on participation → Continuous entrepreneurial discovery
- b. **Network of institutional and stakeholder relationships** that:
  - Is persistent over time
  - Continuously produces information
  - Reacts according to new information
  - Evaluates the results and feeds back information
- c. **Integration of monitoring systems** aimed at learning about actual processes, building trust among stakeholders & ensuring accountability





# Smart specialisation in Europe

REGULATION (EU) 1303/2013  
Applies to the European Regional  
Development Fund (ERDF)

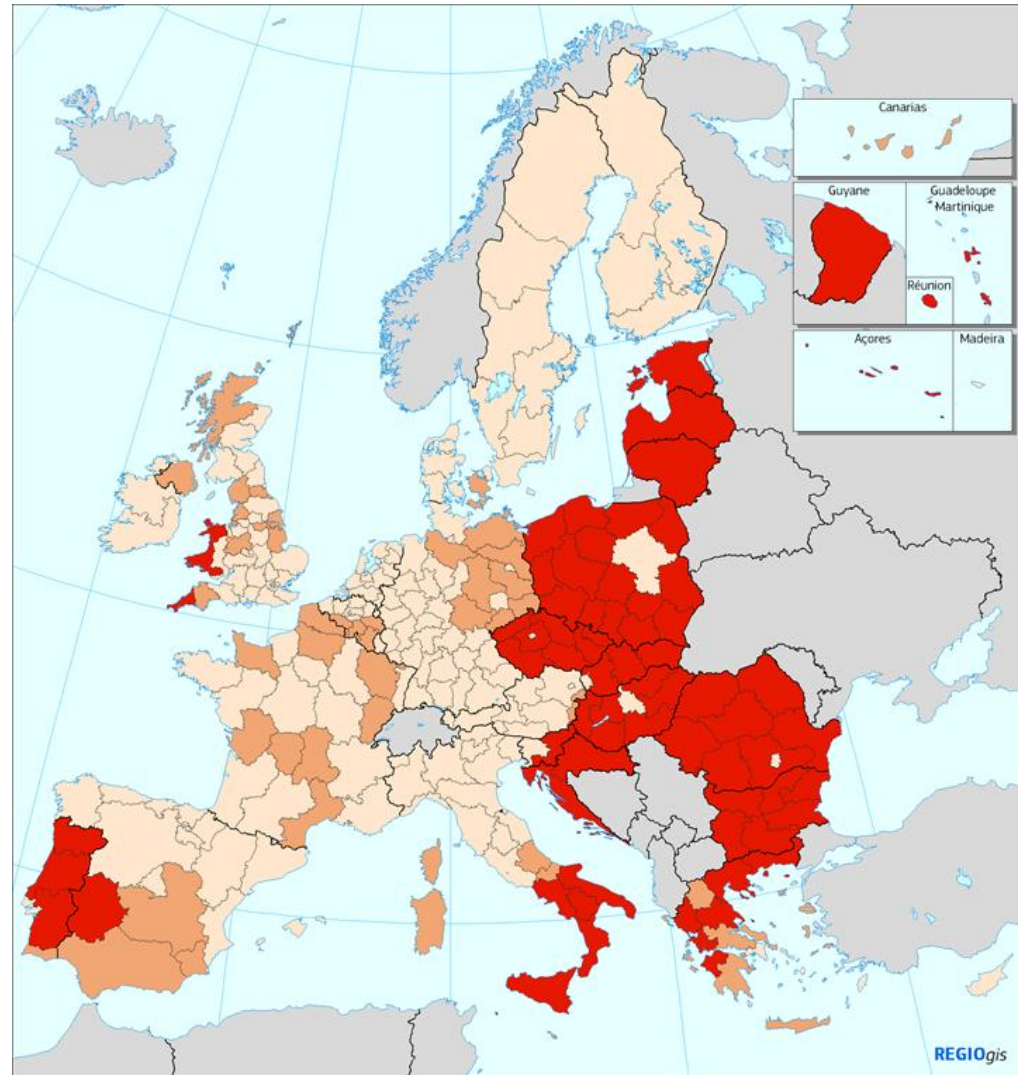
## Ex-ante conditionality

A national or regional smart  
specialisation strategy is in place that:

- is **based on a SWOT or similar analysis** to **concentrate resources** on a limited set of R&I priorities
- outlines measures to **stimulate private RTD investment**
- contains a **monitoring** mechanism

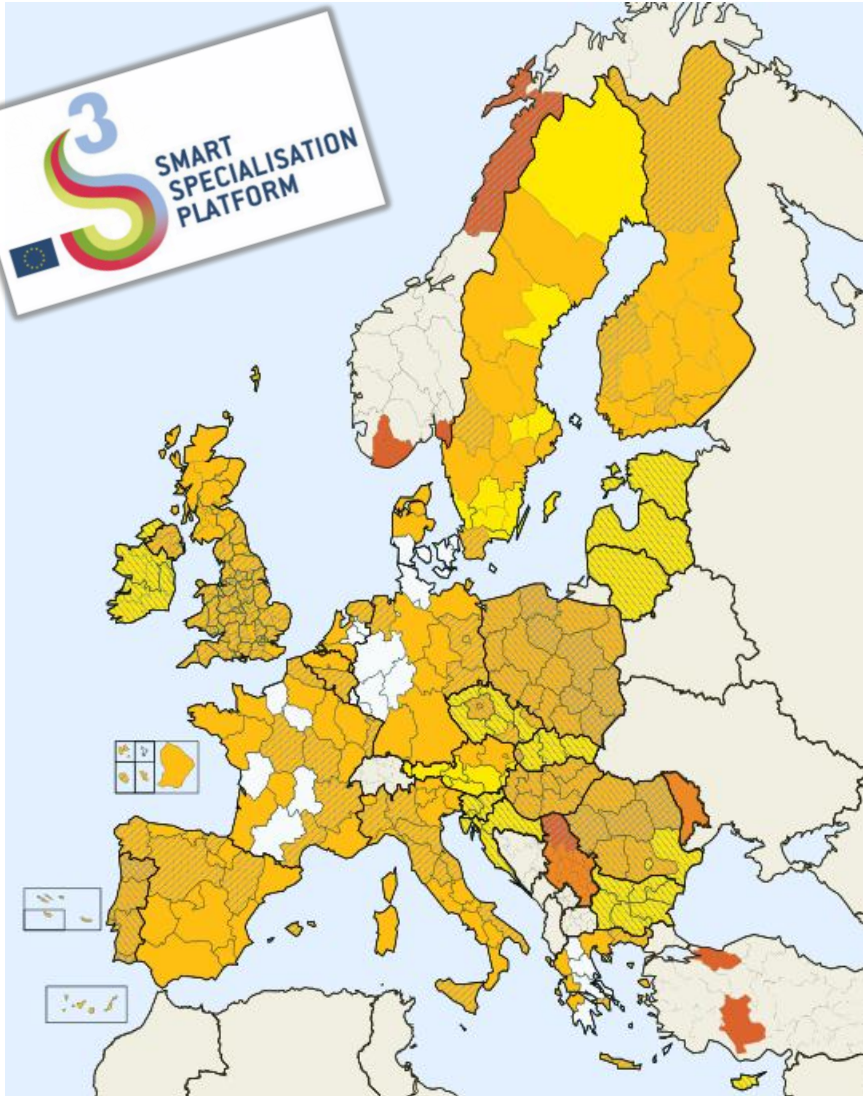
ERDF Eligibility map 2014-2020  
Based on GDP per capita in PPS, 2007-2009

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



# Smart Specialisation Platform

## Broad membership



## Guidance - Analysis - Support

**Comprehensive guidance tools** – RIS3 Guide, Digital Agenda Toolbox, FAQs, Implementation Handbook

**S3 Publication series** - Policy briefs co-authored with leading academics and practitioners; Working papers contributing to conceptual and empirical developments related to smart specialisation

**Supporting tools:** S3 self-assessment (assessment wheel), regional S3 priorities (EYE@RIS3), regional benchmarking, bilateral trade flows & planned ICT investments

## Some achievements

**Wide membership:** 177 regions, 20 countries (incl. RS, MD & regions from NO, RS and TR)

**Strong endorsement** by national/regional policy makers: average 4.5/5 satisfaction ranking

**High "fidelisation rate":** >50% of regions attending workshops come back

**Political endorsement at EU level:** EC (Hahn, Cretu), EP (Winkler), CoR (Markkula), Council



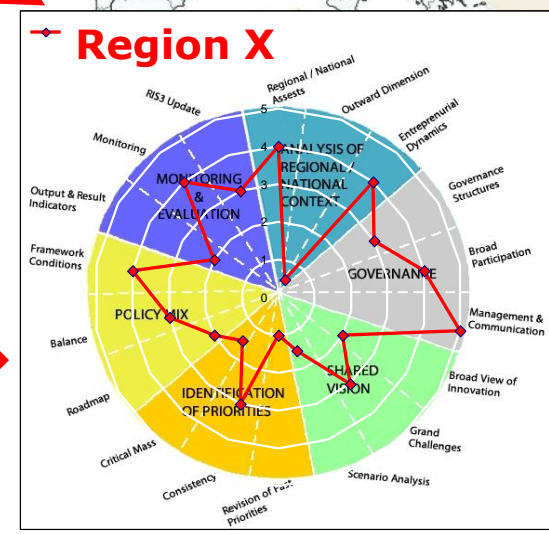


# S3P Supporting the RIS3 Process

from **RIS3 Guide**



through streamlined “easy-to-use”  
**(Self-)Assessment Tool &**  
**benchmarking tools**  
to **RIS3 Peer-Review**  
**& Mutual Learning** exercises  
**& Encoding** of the **S3 priorities**




# The Smart Specialisation Community

## Outward-Looking Dimension of RIS3

- Transnational, cross-border learning and diffusion of policy practices
- Exploration of synergies on specific priority areas and collaboration



## Pan-European S3 Approach as Enabling Condition

- Community of language
  - Community of practice
- 
- Common vocabulary
  - Common methodologies

- **S3 approach as a framing device**
- **Peer-learning workshops as a tool for dialogue**
- **S3 Platform as a scaffolding structure**

# RIS3 Progress & Challenges

## Most EU Regions and Countries have started the implementation phase of RIS3:

- RIS3 are generally stronger at analysis and weaker at monitoring & evaluation
  - S3 principles are sometimes not fully taken on board in the prioritisation process
1. Sometimes involvement of stakeholders limited in depth and scope and not continuous/on-going + progress from a triple to a quadruple-helix governance



## ...S3P challenges still ahead:

1. EU Enlargement and Neighbourhood Countries
2. Preserve the **bottom-up component** of strategy development & adjustment
3. Develop models and share experience on how to **operationalize the entrepreneurial discovery process** in different contexts
4. "Give voice to the voiceless", **avoid capture by closed clubs of incumbent stakeholders**



# **Smart Specialisation (S3) = Participatory... ...and Continuous Process!**

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

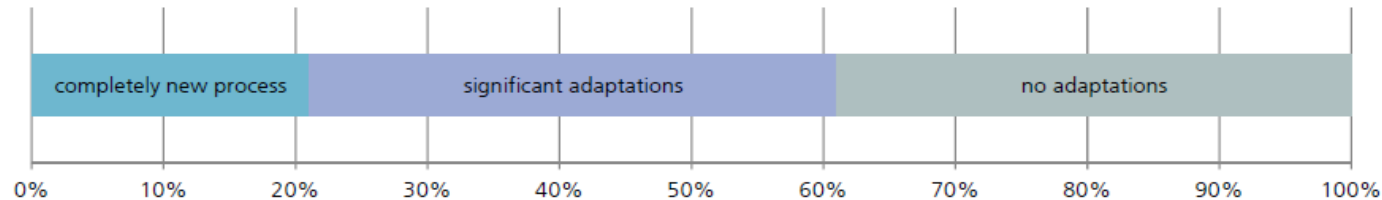
## **S3 - Policy impact?**

"The smart specialisation programme of the European Commission is currently the biggest experiment in innovation and industrial policy in the world and possibly the biggest ever undertaken."

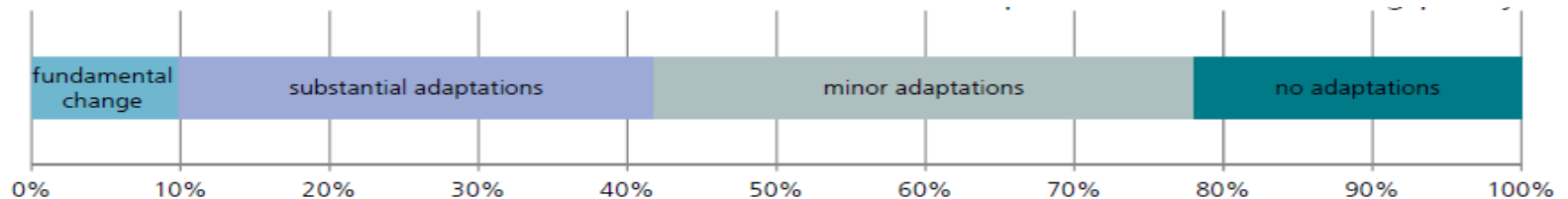
Y. Kuznetsov (World Bank), C. Sabel (Columbia University), [2016 forthcoming]

# Smart Specialisation – Trigger for Change

60% of regional policy makers stated that smart specialisation introduced significant adaptations in the stakeholder involvement process (and 20% spoke about a “completely new process”)



More than 40% stated that the S3 initiated substantial adaptations to the existing policy mix.



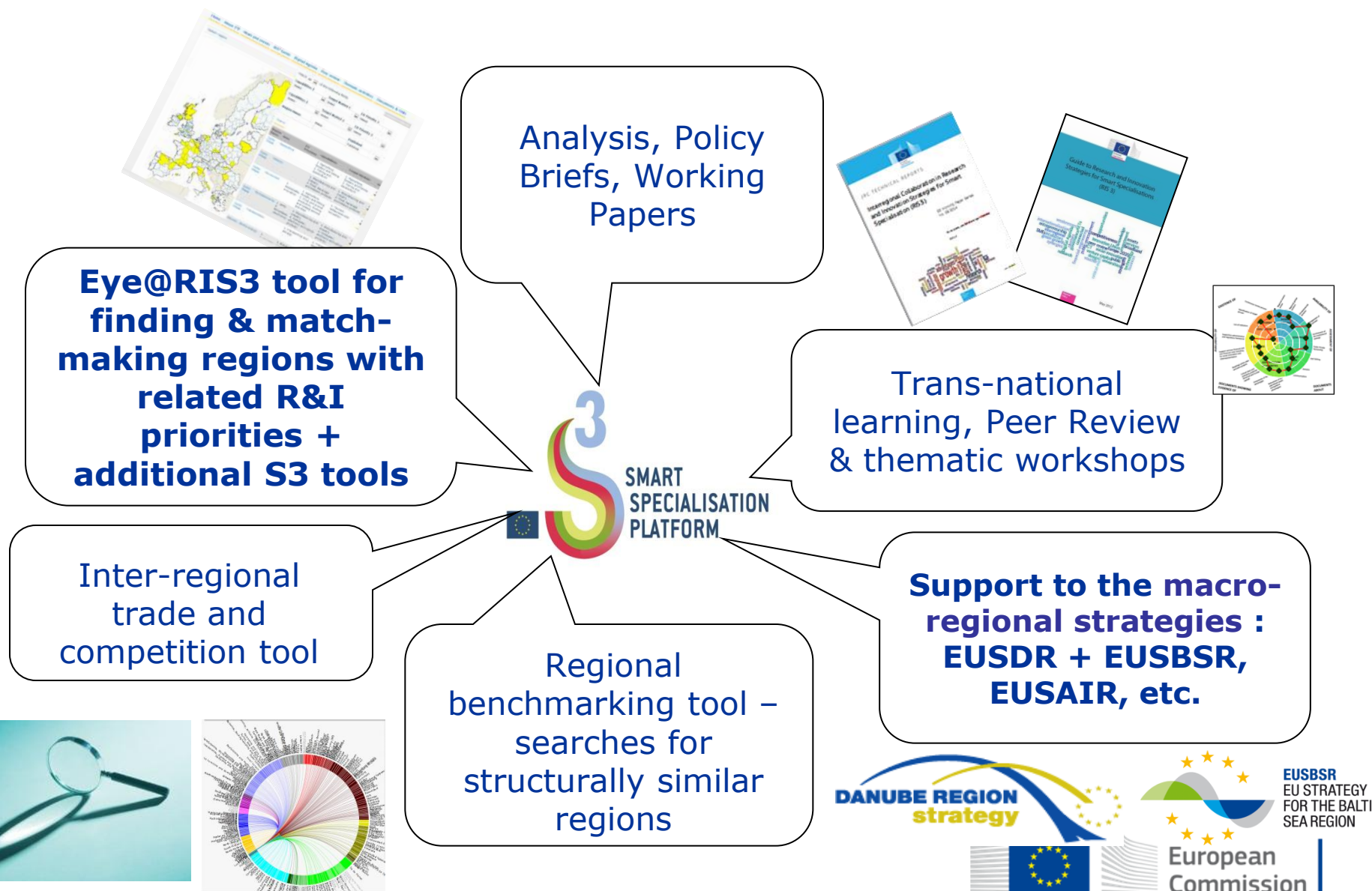
More than 40% of respondents stated that smart specialisation had a high potential to trigger economic transformation in their regions/countries, with a further 38% highlighting an at least moderate potential.

More than two thirds of the respondents stated that S3 has triggered the introduction of “new elements of governance” and more than 90% specified that these novelties will be maintained.

Source: Surveys by Fraunhofer ISI across ESIF managing authorities, relevant regional innovation policy makers and selected consultants across the EU (2013-4-5).



# S3P Support for S3 (Macro-regional) Cooperation



# S3 Online Tools (I)

## Benchmarking Regional Structure

Reference regions = those that share similar structural conditions relevant for innovation-driven economic developm.

### Benchmarking Regional Structure

Finding reference regions based on structural similarities

A key to build sound innovation strategies for smart specialisation at the regional level is to identify opportunities for learning policy lessons and transferring practices from other regions. But what are the regions one should consider as a reference for these purposes? Our proposal is to start by identifying regions that share similar structural conditions which are relevant for innovation-driven development (social, economic, technological, institutional and geographical characteristics). That is, characteristics that cannot be easily changed in the short term and that are demonstrated to affect the way innovation and economic evolution take place in a region. Below you will find an [interactive tool](#) that allows you to identify reference regions across Europe based on a methodology jointly developed by Orkestra - Basque Institute of Competitiveness and the S3 Platform.

#### Documents

- Methodological paper
- List of structural characteristics
- Regional NUTS codes

#### Interactive tool

region

Burgenland (at11)

number of peers

20

refresh

The 20 nearest regions to Burgenland (at11)	Distance index
Kärnten - Austria (at21)	0.0116
Tirol - Austria (at33)	0.0197
Provincia Autonoma Trento - Italy (it2)	0.0225
Steiermark - Austria (at22)	0.0226
Oberösterreich - Austria (at31)	0.0245
Salzburg - Austria (at32)	0.0247
Niederösterreich - Austria (at12)	0.0252
Vorarlberg - Austria (at34)	0.0273
Umbria - Italy (it2)	0.0300
Syddanmark - Denmark (dk03)	0.0314
Comunidad Foral de Navarra - Spain (es22)	0.0319
Cantabria - Spain (es13)	0.0320
Sjælland - Denmark (dk02)	0.0343
Poitou-Charentes - France (fr53)	0.0347
Bourgogne - France (fr26)	0.0352

#### How it works

1. Select a region in the top window
2. Choose the number of reference regions you want to be displayed
3. Press "refresh" to get the results
4. A list of regions will appear on the right side of the screen sorted in descending order from the ones that are more similar (top) to the less similar (bottom) to the region selected
5. The order is given by a synthetic index of structural distance (lower value=structurally closer to the selected region) explained in the methodological paper.

DIMENSIONS	ELEMENTS	VARIABLES	SOURCES	YEAR	UNIT
1. Geo-demography	Regional size	Total Population	Eurostat	2011	people
	Ageing	Population >= 65	Eurostat	2011	%
		Population <15	Eurostat	2011	%
	Urbanisation	Pop. in urban and comm. areas	DG Regio	2006	%
	Accessibility	Multimodal accessibility	ESPON	2006	0-100 index
2. HHRR educ. Level	HHRR educational level	Pop. with upper secondary and tertiary ed.	Eurostat	2012	%
3. Technological specialization	Technological distribution (patents)	Electrical engineering	OECD REGPAT	2006-2010	%
		Instruments	OECD REGPAT	2006-2010	%
		Chemistry	OECD REGPAT	2006-2010	%
		Mechanical engineering	OECD REGPAT	2006-2010	%
		Other fields	OECD REGPAT	2006-2010	%
	Technological concentration (patents)	GINI index of 35 subfields	OECD REGPAT	2006-2010	0-100 index
4. Sectoral structure	Economy's sectoral distribution	Agriculture, forestry and fishing (A)	Eurostat LFS <sup>(1)</sup>	2012	%
		Industry (except const.) (B-E)	Eurostat LFS <sup>(1)</sup>	2012	%
		Construction (F)	Eurostat LFS <sup>(1)</sup>	2012	%
		Wholesale and retail trade, transport etc. (B-I)	Eurostat LFS <sup>(1)</sup>	2012	%
		Information and communication (J)	Eurostat LFS <sup>(1)</sup>	2012	%
		Financial and insurance activities (K)	Eurostat LFS <sup>(1)</sup>	2012	%
		Real estate activities (L)	Eurostat LFS <sup>(1)</sup>	2012	%
		Professional, scientific and technical activities (M-N)	Eurostat LFS <sup>(1)</sup>	2012	%
		Public administration (O-Q)	Eurostat LFS <sup>(1)</sup>	2012	%
		Arts, entertainment and recreation (R-U)	Eurostat LFS <sup>(1)</sup>	2012	%
	Sectoral concentration	Top of 5 subsectors (2 digits) (% total employment)	Eurostat SBS	2011 or closest	%
		Mining and quarrying (05-09)	Eurostat LFS	2011	%
		Food, drinks and tobacco (10-12)	Eurostat LFS	2011	%
		Textiles, apparel and leather (13-15)	Eurostat LFS	2011	%
		Wood, paper and printing (16-18)	Eurostat LFS	2011	%
		Chem., pharm., rubber, plastic and refined petroleum (19-22)	Eurostat LFS	2011	%
		Non-metallic mineral products (23)	Eurostat LFS	2011	%
		Basic metals and metal products (24-25)	Eurostat LFS	2011	%
		Electric, electronic, computer and optical equipment (26-27)	Eurostat LFS	2011	%
		Machinery (28)	Eurostat LFS	2011	%
5. Firm size	Firm size	Average firm size	Eurostat SBS	2009 or closest	# employees
6. Openness	Trade openness	Total exports (% GDP)	Fraunhofer ISI and Orkestra	2009 or closest	%
7. Institutions / Values	Multilevel government	Decentralisation	BAK Basel Economics	2009	0-100 index
		Quality of institutions	Charron et al.	2012	standardized values
	Social and institutional capital	Feeling of safety of walking alone in local area after dark	ESS	2010 or closest	1-4 index
		Most people can be trusted or you can't be too careful	ESS	2010 or closest	0-10 index
	Entrepreneurial / innovative attitudes	Important to think new ideas and being creative	ESS	2010 or closest	1-6 index
		Important to try new and different things in life	ESS	2010 or closest	1-6 index

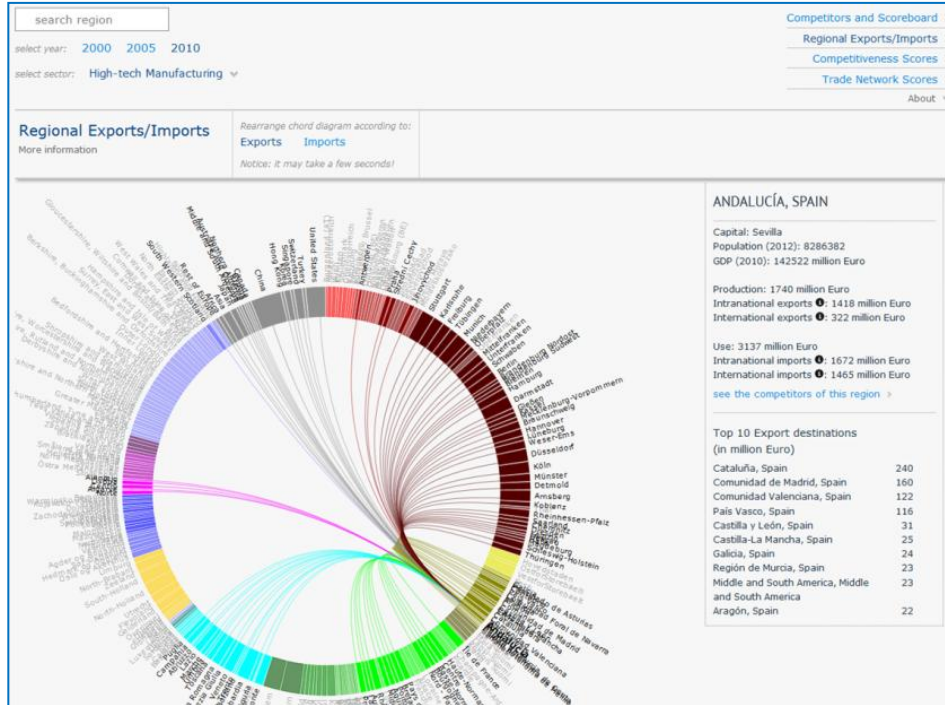
Note: (1) Data compiled through a request to Eurostat.



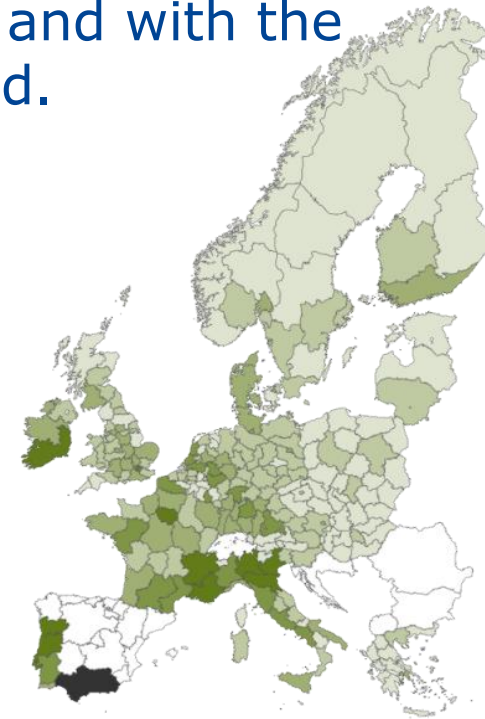
European  
Commission

# S3 Online Tools (II)

## Inter-regional Trade and Competition Tool



Visualising the trade flows (yrs 2000/2005/2010) between 256 European NUTS2 regions and with the rest of the world.



The revealed competition map shows which region competes internationally with whom, on what and where.

**Note! BG, HR and RO not covered! Similarly Non-EU countries not covered!**

# S3 Online Tools (III)

EYE@RIS3

Portugal

Refresh

Match 

All

 of the following fields:

Research & Innovation Capabilities

Select

Business Areas & Target Market

Select

EU Priority

Sustainable innovation

Research & Innovation Capabilities (Subcategory)

Select

Business Areas & Target Market (Subcategory)

Select

EU Priority (Subcategory)

Select

Region/Country Name

NUTS ID

Description of Priority

☒ Refined Search

☐ Approximated Search

Country/Region type

☒ EU Countries with Encoded S3 Priorities

☒ EU Regions with Encoded S3 Priorities

☒ Non-EU Countries with Encoded R&I Priorities

☒ Non-EU Regions with Encoded R&I Priorities

Search

Add priorities

Export

Name [NUTS ID]	Description	Research & Innovation Capabilities	Business Areas & Target Market	EU Priority
Jämtlands län [SE322]	Clean tech - co...	1. Energy production & distribution 2. Power generation/renewable sources	1. Water supply, sewerage, waste management & remediation activities	1. Sustainable innovation 2. Eco-innovations
Övre Norrland [SE33]	Sustainable ene...	1. Energy production & distribution 2. Power generation/renewable sources	1. Manufacturing & industry	1. Sustainable innovation 2. Sustainable energy & renewables
Västerbottens län [SE331]	Sustainable ene...	1. Energy production & distribution	1. Energy production & distribution	1. Sustainable innovation 2. Sustainable energy & renewables
Slovenia [SI]	Mobility - deve...	1. Manufacturing & industry 2. Computer, electronic & optical products	1. Transporting & storage 2. Road transport & related services	1. Sustainable innovation 2. Smart green & integrated transport

EU Countries with Encoded S3 Priorities

EU Regions with Encoded S3 Priorities

Non-EU Countries with Encoded R&I Priorities

Non-EU Regions with Encoded R&I Priorities

Guidelines for adding priorities to the Eye@RIS3 tool

"EYE@RIS3"  
Tool mapping  
S3/R&I  
priorities!

<http://s3platform.jrc.ec.europa.eu/map>



# S3 Online Tools (IV)

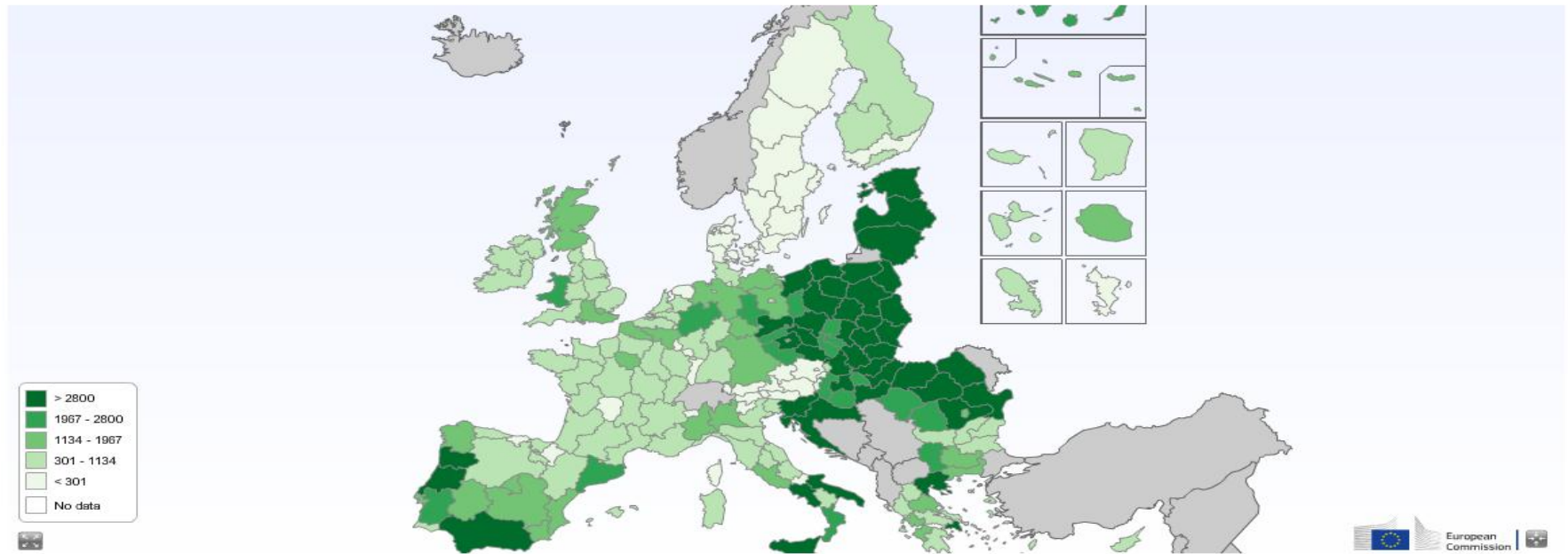
## ESIF-Viewer (visualising planned investments using European Structural and Investment Funds)

**Countries** All selected (28) ▾ **Regions** All selected (209) ▾ **OP Types** All selected (4) ▾ **Intervention fields** All selected (17) ▾

► Show advanced filters

Reset Search

► Show selected search parameters



Total: 346,957 million

Share this search

Export summary to pdf Export summary to csv Export summary to word

Grouped by country (28)

By region (209)

By operational programme (380)




By category of intervention (123)

By thematic objective (13)



# S3 Online Tools (V)

## ICT Monitoring - Planned ICT Investments under ESIF

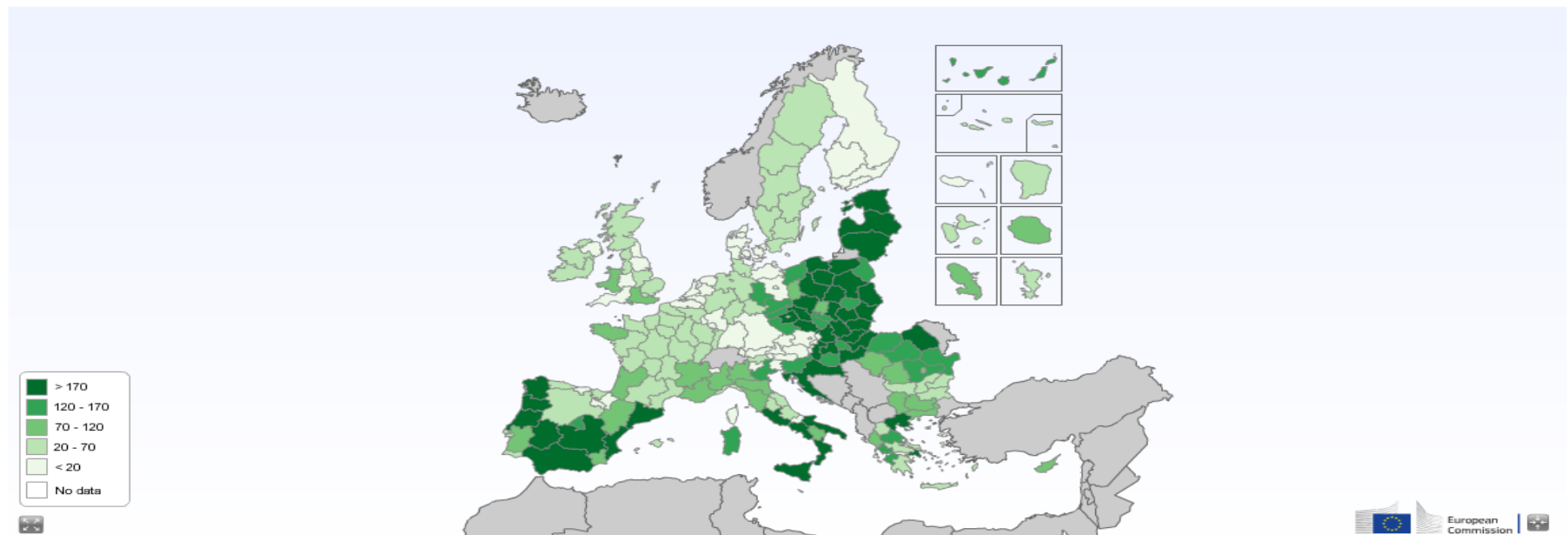
Search by: **Amounts**  **Keywords**  **Financial Forms** 

**Countries** All selected (28) ▾ **Regions** All selected (209) ▾ **Predefined filters** 12 selected ▾

[Show advanced filters](#)

[Reset](#) [Search](#)

[Show selected search parameters](#)



**Total: 21,453 million**

[Share this search](#)

[Export summary to pdf](#) [Export summary to csv](#) [Export summary to word](#)

**Grouped by country (28)**

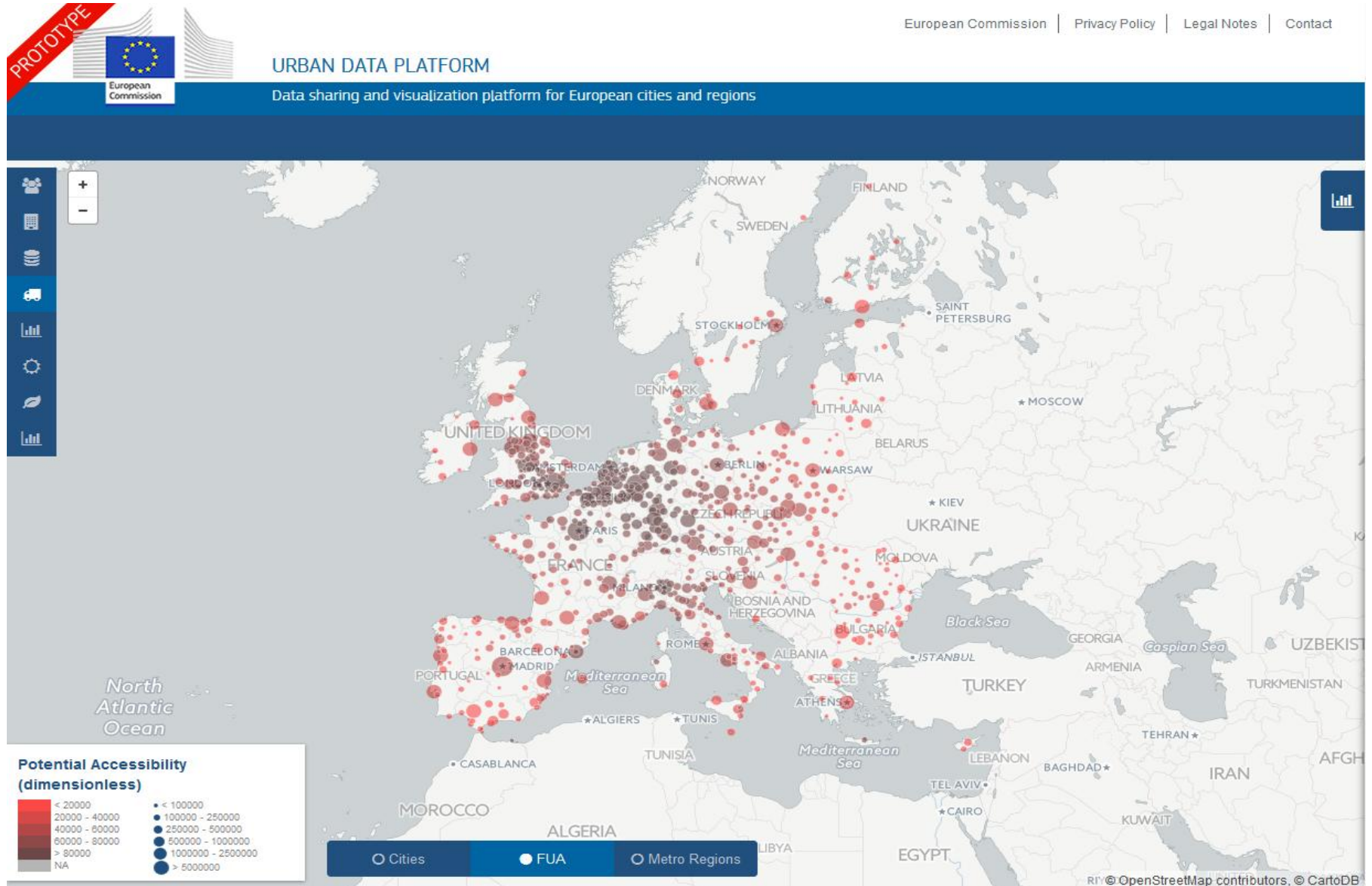
[By region \(209\)](#)

[By operational programme \(312\)](#)

[By category of intervention \(27\)](#)

[By thematic objective \(12\)](#)

# S3 Online Tools (VI) - Urban Data Platform

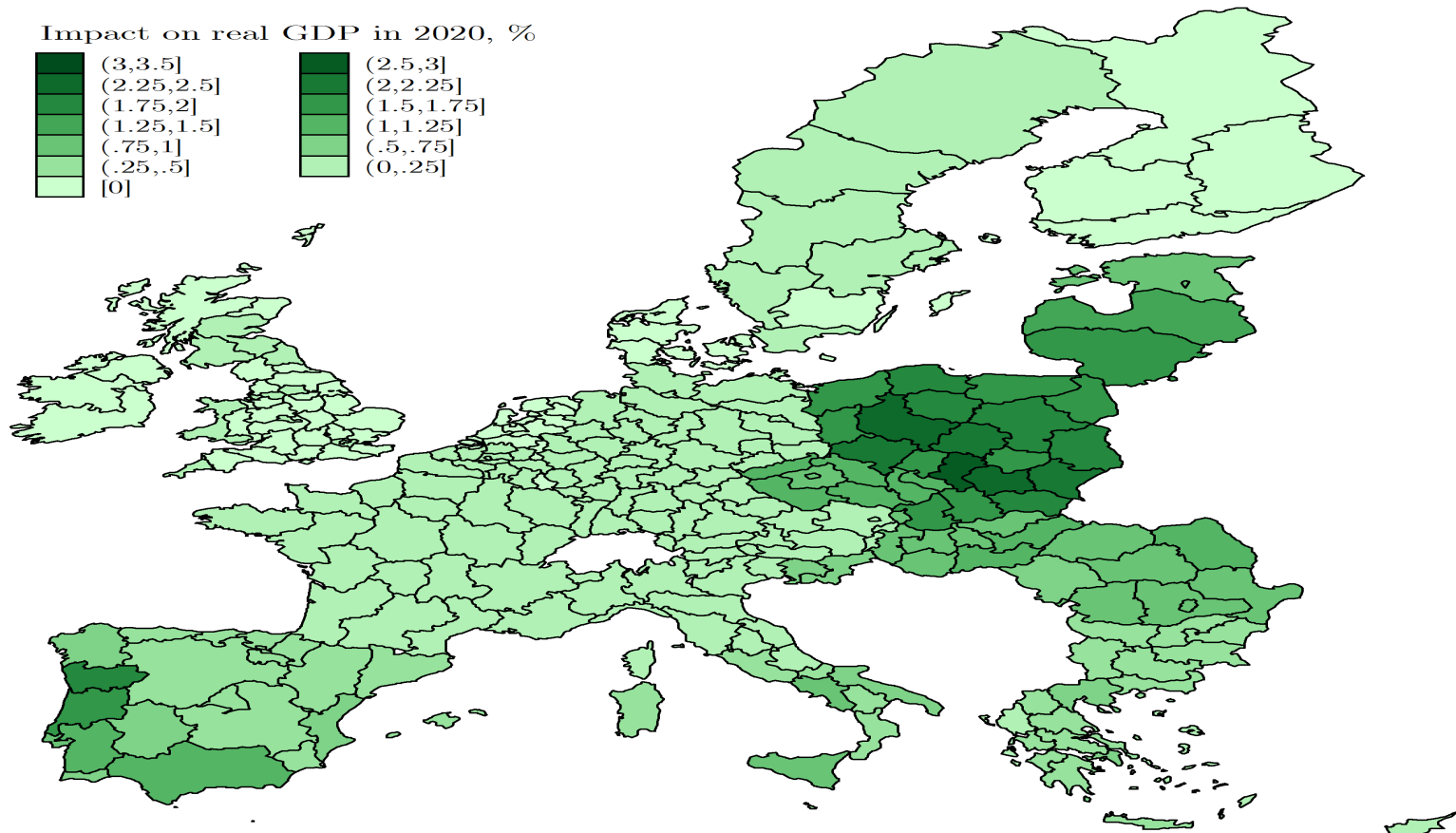


Upcoming!

# More upcoming S3 Online Tools in the coming weeks/months (VII...)

## Synergies H2020/ESIF, EU Energy Investments Tool, etc.

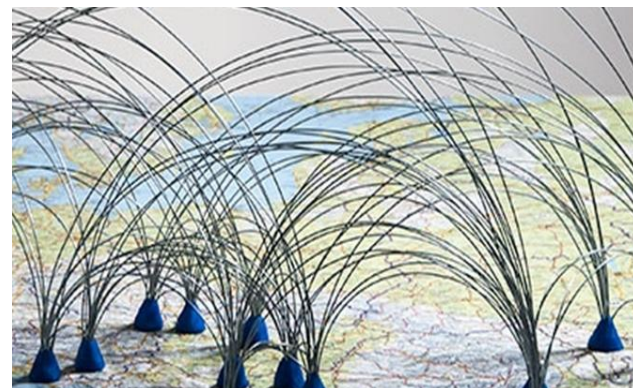
### Impacts of trade cost relations on regional GDP



- > ex-ante impact assessment of EU regional policies
- > evaluation of the effects of RIS3 projects

# JRC Support to Transnational Cooperation in the Danube Macro-region

- JRC is a partner in Danube-INCO.NET (FP7 funded project for the EUSDR with 19 partners from 12 countries)
- 4 partners from non-EU countries:
  - Ukraine** - Institute of Market Problems and Economic & Ecological Research of the National Academy of Science
  - Moldova** - Centre of International Projects of the Academy of Sciences, Moldova
  - Serbia** - Institute Mihajlo Pupin
  - Bosnia and Herzegovina** - Ministry of Civil Affairs
- S3P works towards promoting a 'Smartly Specialised Danube' supporting RIS3 through transnational collaboration and learning



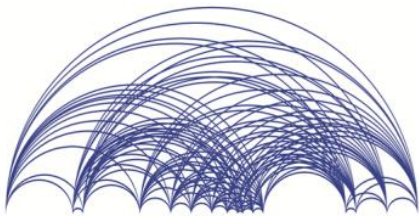
# Outcomes of S3 Design Learning Workshop in Chisinau

~ 80 participants from 14 countries including non-EU countries such as Ukraine, Turkey, Serbia, Montenegro, Bosnia and Hercegovina & Moldova



Workshop report "Towards Smart Specialisation in Non-EU Countries" is available [online](#)

Policy brief on "The Role of S3 in the EU Enlargement and Neighbourhood Policy" will be available in October 2016



**Danube-INCO.NET**  
Advancing Research and Innovation  
in the Danube Region





# JRC-IPTS Activities in Associated Countries

Danube

Danube-  
INCO.net

Scientific  
support  
to EUSDR

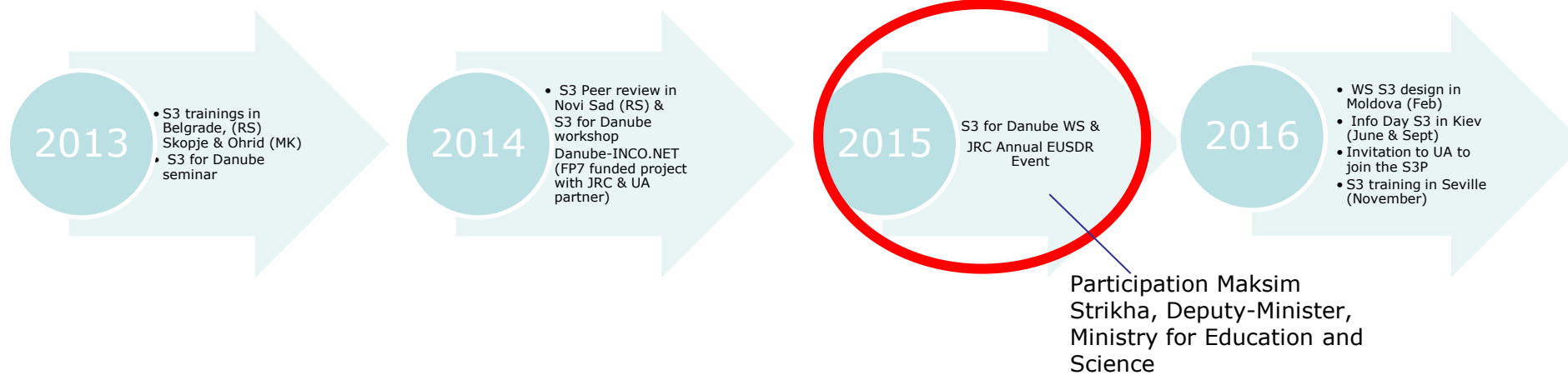
JRC  
E&I  
Action

Foresight  
training

Targeted  
support

# S3 Platform Supporting Activities to UA and Enlargement/Neighbourhood Countries related to Smart Specialisation (S3)

**S3 Platform through 'Smartly Specialised Danube' has been supporting transnational collaboration and mutual learning through S3 approach in the enlargement and neighbourhood countries since early 2013.**



# Way forward

- **Facilitate alignment of roadmaps within EU macro-strategies in support of S3**
- **Further develop online tools for benchmarking & priority mapping**
- **Identifying concrete projects**
- **Policy support to associated countries with focus on Ukraine, Serbia and Moldova in 2016:**
  - **Awareness raising**
  - **Training**
  - **Expert support**
  - **Active participation in selected workshops on S3**
- **Surveys, analyses & S3 policy briefs**

## S3 Beyond the EU... growing interest in...

- Norway and Switzerland (at national & regional level)
- EU Candidate and Neighbourhood countries (Serbia, Turkey, Tunisia, Moldova, **Ukraine**,...)
- Latin America (Chile, Brazil, Peru, Colombia) Australia & South Africa

## Collaboration JRC-Commission on the S3

- JRC and the Commission will continue to work through active participation in S3 related projects (**FP7** and **INCO.NET**) and through the JRC Enlargement & Internationalisation (E&IA) S3 related activities.
- **JRC E&IA S3-support activities start off in 2016:**
  - Info days in target countries (**MD** 2/16; **UA** 9/16; **RS** 10/16)
  - Training seminar (7-9 Nov. 2016) & Immersion stay (10-11 Nov. 2016, Seville)
  - Policy roundtable at Open Evaluation Conference (Danube INCO.NET; 25 Nov. 2016, Vienna)
  - Set up of expert support (1 expert per country)
  - Possibly participation in EDP events of the lagging regions' project.

# Thank you & stay in touch



**S3 Platform webpage:** <http://s3platform.jrc.ec.europa.eu>

**Twitter:** @S3Platform