

# Joint Research Centre

the European Commission's in-house science service

*Serving society  
Stimulating innovation  
Supporting legislation*

## Smart Specialisation S3 Platform

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## Contents

- S3: a new approach to place-based innovation
- S3 platform: tailored support & guidance, analysis & reports
- From specialisation to value chains: thematic platforms
- From design to implementation: an implementation handbook

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

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# 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
- = **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
- = **place-based economic transformation**: rejuvenate traditional sectors through higher-value activities

## Do it through a "RIS3" approach:

**ANALYSIS:** discovery of the socio-economic and research-innovation engines of regional growth, competitive advantages & weaknesses.

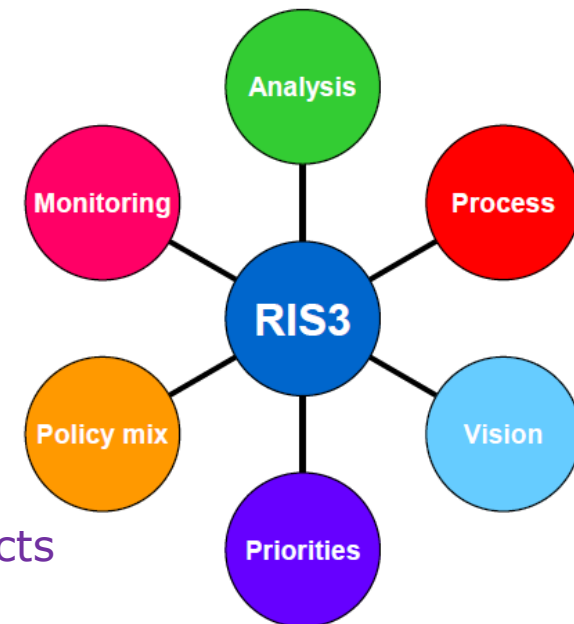
**PROCESS:** governance, stakeholder involvement, institutional setting.

**VISION/GOAL/OBJECTIVES:** common goals for the future.

**PRIORITIES:** search and selection of activities & projects & actions & technological areas to focus on.

**POLICY MIX:** policy mechanisms and instruments - social, industrial, innovation, labour, research, development.

**MONITORING:** selection indicators and evaluation process.





# Implementing RIS3 – new perspectives?

1. From "*silo*"-driven to *outcome driven* policies
  - What do we want to obtain?
  - Effectiveness rather than efficiency
2. Need to break the path-dependency
  - Genuine stakeholder involvement beyond usual suspects – make the EPD come true
  - Radical restructuring and experimental tools
3. Wide range of policies – *governance* challenge
  - But also specialisation specific instruments
  - Mix of horizontal and targeted support tools
4. Open regions – a local node in global networks
  - Inter-regional partnerships for the reinforcement of international value chains







## Smart Specialisation Platform

Created in 2011 to provide science-based professional advice to EU **national and regional** policy-makers for the establishment and implementation of their research & innovation strategies for smart specialisation (**RIS3**), make better use of the European Structural and Investment Funds (**ESIF**) and thus contribute to the **Europe 2020** goals.

### A privileged perspective:

**Outside the Commission** - Support to countries and regions developing and implementing their RIS3 and to their "triple/quadruple helix" partnerships

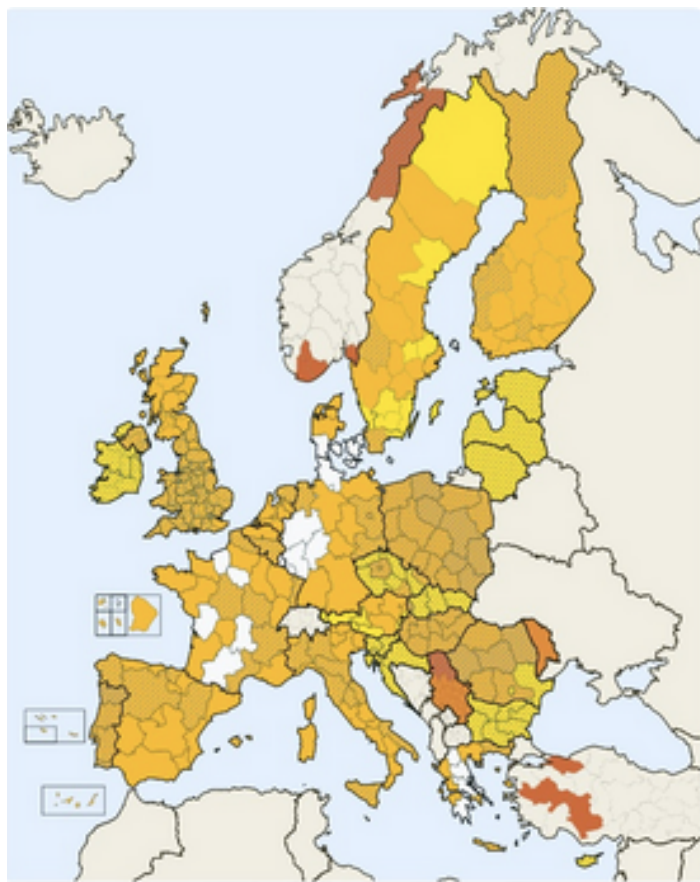
**Inside the Commission** - Support to the policy DGs (namely in assessing ESIF programming documents: 28 Partnership Agreements and more than 180 Operational Programmes)

**In the scientific community** - Contribution to the conceptual and methodological debate around smart specialisation



# S3 Platform

## Some achievements

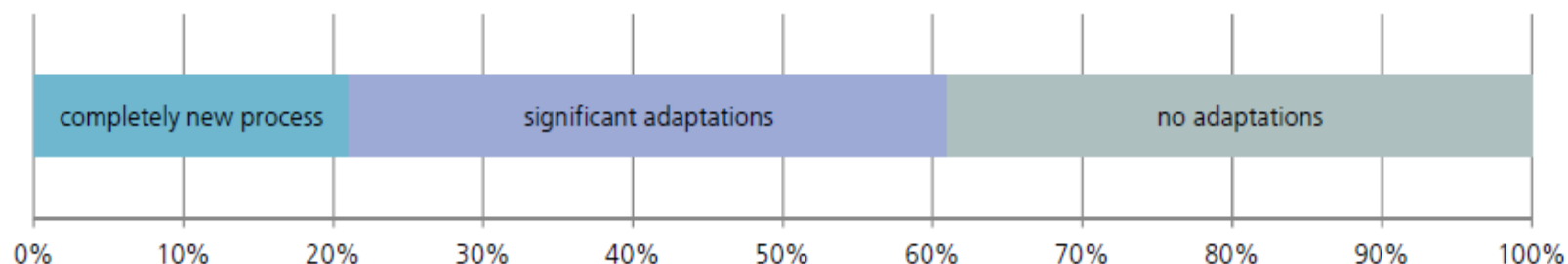


- Wide membership: 179 regions + 18 countries
- Strong endorsement by national/regional policy makers: average 4.5/5 satisfaction rankings (86% rankings at least 4/5; 100% at least 3/5)
- High “fidelisation rate”: > 50% of regions attending workshops come back
- Political endorsement at EU level: EC (Hahn), EP (Winkler), CoR (Markkula), Council (Van Rompuy)

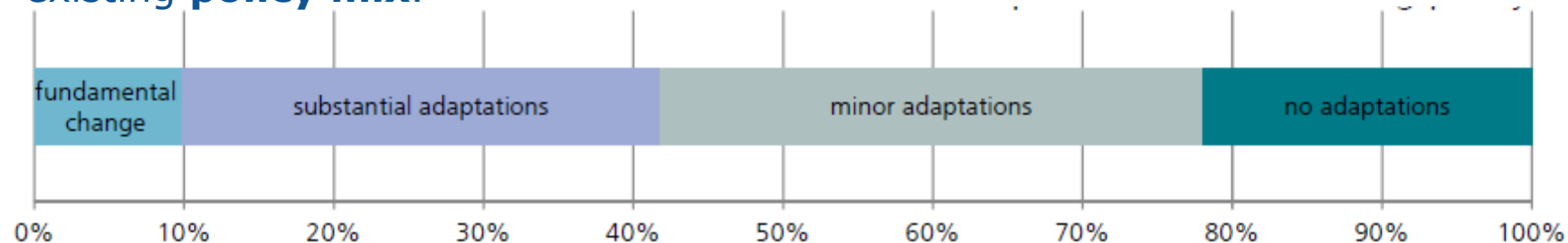


## S3 Platform – Policy achievements

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



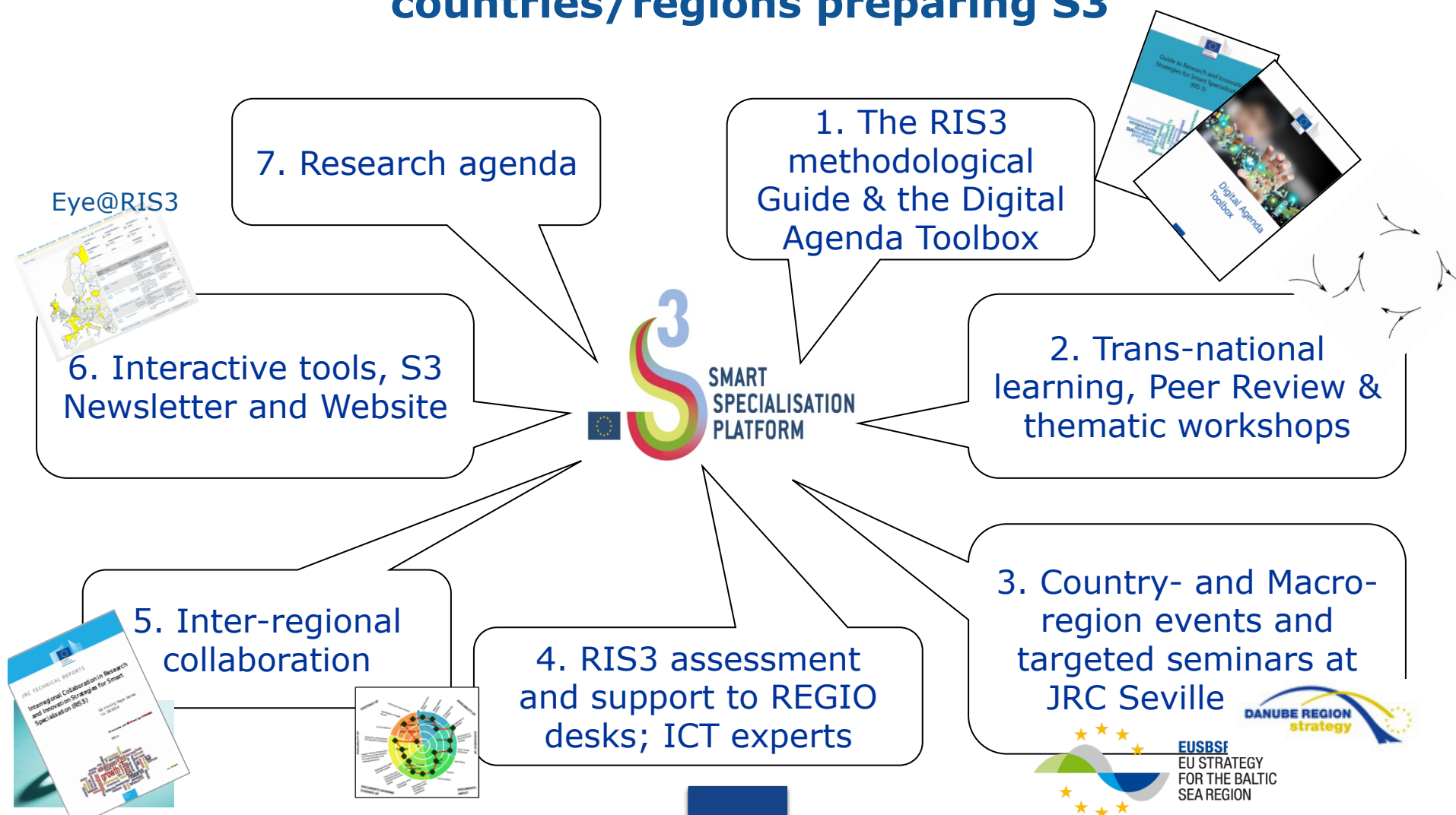
More than 40% state that there have been substantial adaptations to the existing **policy mix**.



**Source:** Survey by Fraunhofer ISI across ESIF managing authorities, relevant regional innovation policy makers and selected consultants across the EU (2013 Q3).



## Main activities of S3 Platform in support of the countries/regions preparing S3





## Services & Tools



Thematic  
Platforms



Guidance



Targeted  
Support



Cooperation



Communities &  
Actors



Governance

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

EYE@RIS3



ESIF - viewer



ICT Monitoring



Regional  
Benchmarking



EU Trade



R&I Regional  
Viewer



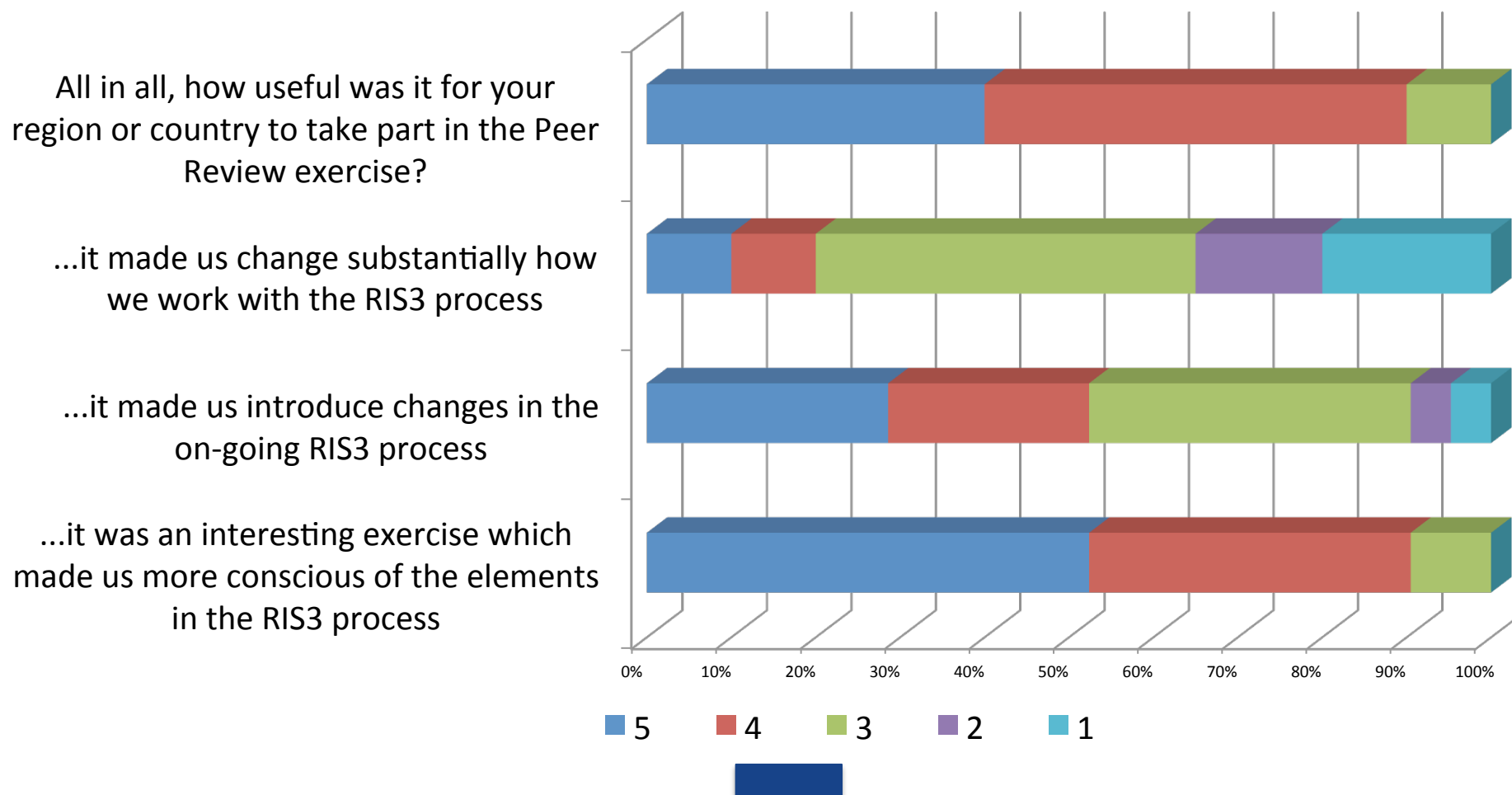
## Peer review of S3

- Own methodology inspired by trans-national mutual learning objective and: (i) exchange of roles; (ii) concentration in space and time; (iii) mix of peers and experts; (iv) focus on questions defined by countries/regions under review
- No. of peer-reviews workshops: **18** (from Jan 2012 to Feb 2015)
- Peer reviewed regions: **53**
- Peer reviewed countries: **16**
- Average no of regions/countries present at each workshop: **25**
- Average participants at each workshop: **56**

<http://s3platform.jrc.ec.europa.eu/peer-review>



# Impact of the peer review exercise (Survey 2013 Q4)



## Guidance – analysis – supporting tools



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

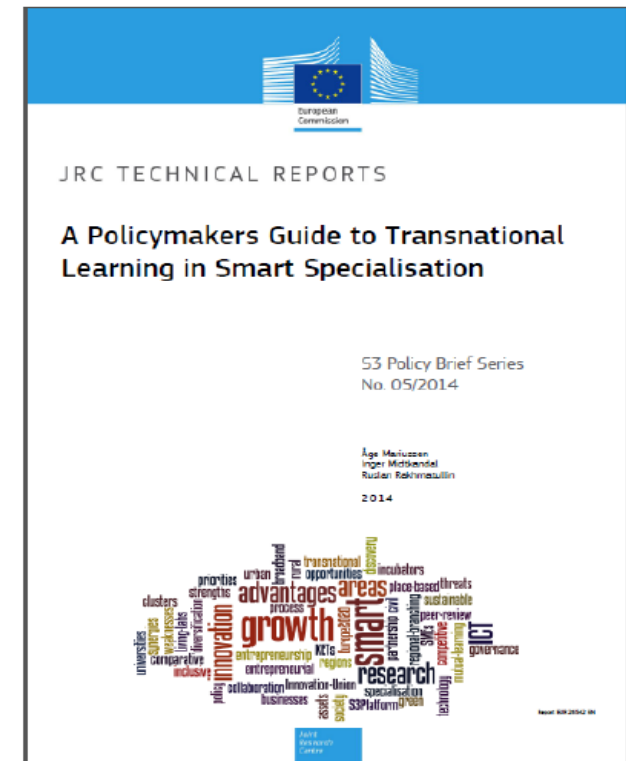
**S3 Publication series** - Policy briefs co-authored with lead academics (Foray, Boschma, Rodriguez-Pose, Goddard) and practitioners; Working papers providing scientific analysis to contribute to conceptual and empirical developments related to smart specialisation

**Supporting tools** developed on: RIS3 self-assessment (assessment wheel); regional RIS3 priorities (Eye@RIS3), regional benchmarking, bilateral trade flows

*All is publicly accessible on the web*

## How can one go from dialogue to a real change?

- From an outsider perspective to self-discovery
- What is your challenge and what is your driver of change?
- Points towards what you need to do in the different S3 steps
- Points out the characteristics of transnational learning that could be particularly useful



# Collaboration across borders

## Alignment of roadmaps

- Fostering alignment between European, national and regional innovation roadmaps
- Promoting synergies and co-investment opportunities (e.g. in the context of Horizon 2020 and the “stairway to excellence”)
- Support the creation of groups around common themes to work with territorial co-operation strand of the EU cohesion policy
- A specific focus on  
EU macro-regional strategies  
Baltic Sea  
Danube Region







## S3 Platform – Thematic activity

*Development of **mutual learning and sharing tools** with respect to the implementation of S3 and the alignment of innovation roadmaps across Europe. Combination of **top-down and bottom-up** needs/wishes – regions, countries, EU funded trans-national initiatives, EU macro-regions, stakeholders, etc.*

**Across the actors of S3:** Universities (with EUA); Science parks (with JRC and IASP); SMEs (with UEAPME and EURADA); RTOs (with EARTO)

**Across the S3 process:** Entrepreneurial process of discovery; Governance; M&E; Priority setting; OP action plans; Co-ordination of national and regional level

**Across regional features and aggregations:** Macro-regional strategies (Danube; Baltic), Sparsely populated regions; Outermost regions; Rural areas

**Across common S3 domains:** ICT/Digital growth; KETs (e.g. advanced manufacturing); Energy (e.g. fuel cells & hydrogen); Value chains

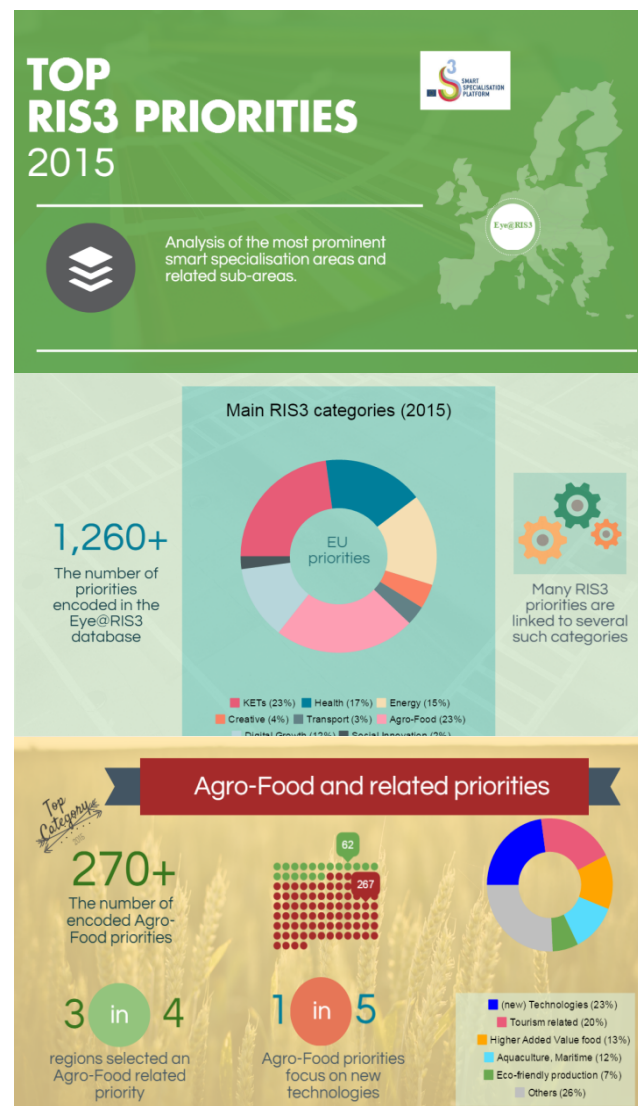


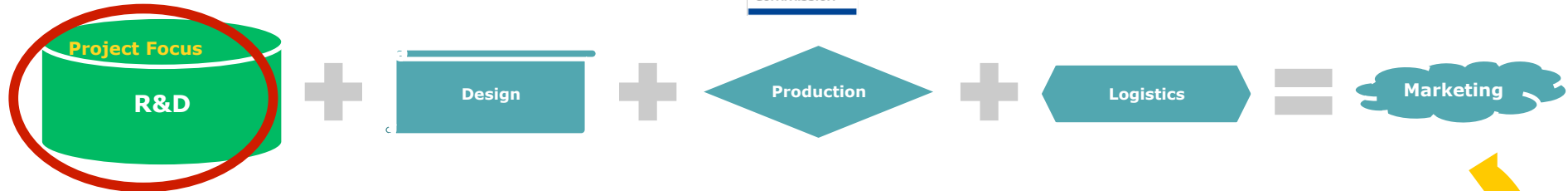
## Why thematic

New and emerging **value chains** through the **interconnection of regional eco-systems** and their actors in quadruple helix in specific S3 investment areas.

S3 is an **engine for the development of European eco-systems** that are necessary to gather critical mass for market breakthroughs.

**EC** providing a **multi-level support mechanism**, combining efforts at regional, national and European level.





## Mapping priority areas

Eye@RIS3

Multi-level Mapping  
(innovation eco-systems)

Existing and  
new EU wide  
initiatives

Thematic sub-areas

EU Players

Government

Industry,  
Business  
Players

Knowledge  
Generators

Funding  
Sources

Vanguard  
Initiative

Energy

Agro-  
Food

ICT

KETs

Health

DG JRC Units  
Other DGs (incl. AGRI, CONNECT,  
RESEARCH, REGIO), EIT, EIB...

National,  
Region, Local  
authorities

SMEs, MNEs,  
Clusters

Academia,  
RTOs, labs

Regional, EU,  
International,  
Business R&D

EEN, EARTO  
EURADA

EU Cluster  
Observatory,  
KETs  
Observatory

Shared Interest  
Areas

Joint/Co-funded  
Calls

Joint Pilots:  
Demonstration  
Projects (TRL6/7)

Access to  
New markets  
and funding

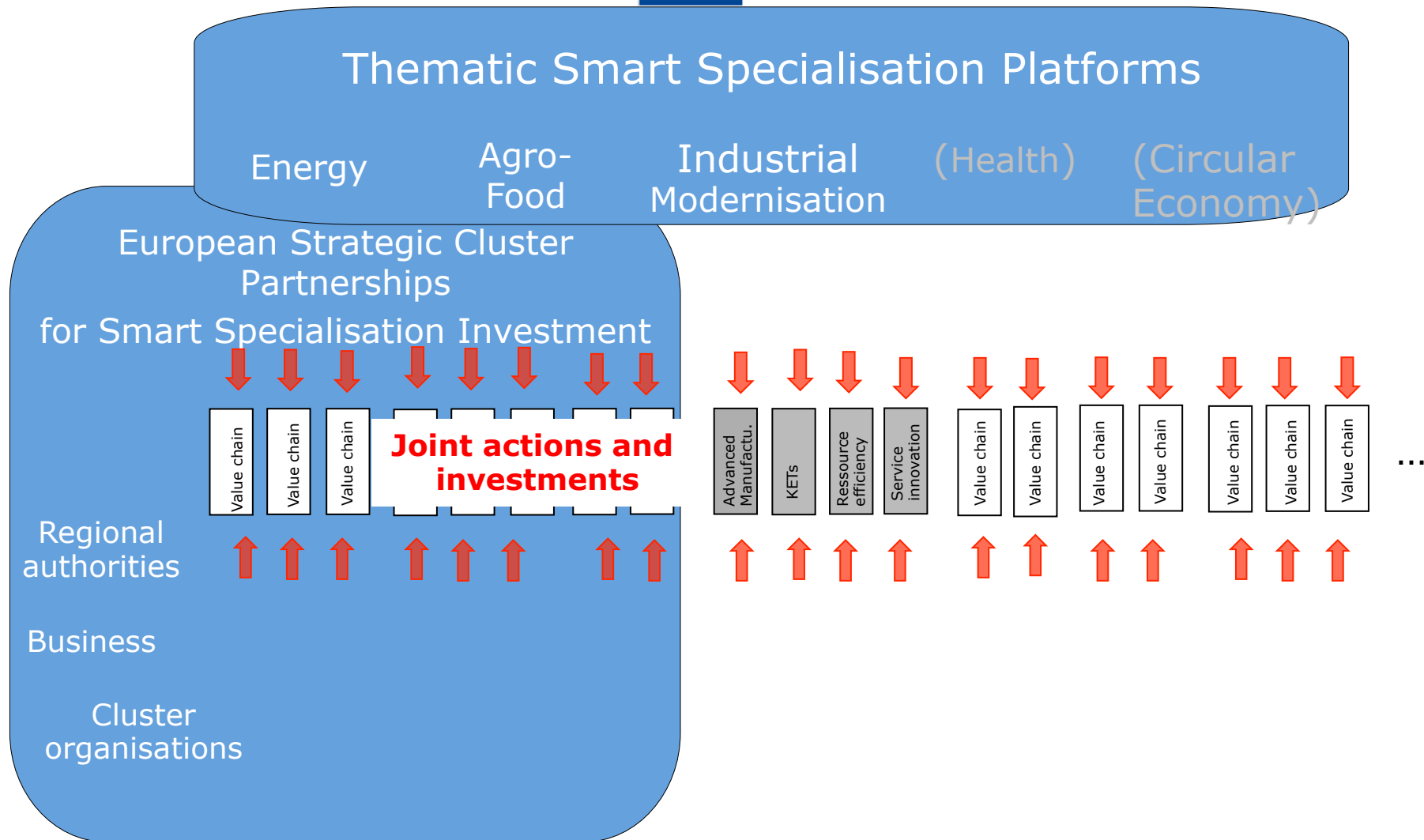
**New Products**  
**New Value  
Chains**



## ANALYSIS OF OVERLAPS IN EU LEVEL PRIORITY AREAS (BASED ON DATA ENCODED IN THE EYE@RIS3 DATABASE)

		167	1350	EU28 PRIORITIES	
Categories				count, n	%
1	AGRO-FOOD RELATED			272	22%
2	KETs RELATED			267	21%
3	HEALTH RELATED			192	15%
4	ENERGY RELATED			178	14%
5	DIGITAL AGENDA RELATED			144	11%
6	ENVIRONMENT RELATED			59	5%
7	CREATIVE/CULTURAL RELATED			48	4%
8	TRANSPORT AND LOGISTICS RELATED			38	3%
9	SOCIAL INNOVATION, ORGANISATIONAL MODELS, OTHERS			25	2%

# AN INTEGRATED APPROACH





# S3 and Thematic Platforms

- On June 2, 2016, EC services jointly launched 2 new thematic Platforms
  - S3 Agri-Food Platform (REGIO, AGRI, RTD, JRC)
  - S3 Industrial Modernisation Platform (REGIO, GROW, JRC)
- EC's support:
  - Ongoing support and **coaching** by S3P staff
  - Support **services online** (dedicated pages with an overview of the approach, guidance, thematic events, open call, submitted proposals, etc.)
  - The development of interregional collaboration in 4 steps (Vanguard model):
    1. **Learn**: (regional capabilities, RIS3 priorities and strategic interests);
    2. **Connect** (key stakeholder search and matching/brokerage services);
    3. **Demonstrate** (advisory services and support to deployment of innovative products/services);
    4. **Upscale/Commercialise** (support with financing, communication, documentation and knowledge management)







## Launch: 2 new S3 Platforms at the Smart Regions Conference, Brussels 1-2 June 2016

Director-General Walter Deffaa (REGIO), highlighting that smart strategies mean putting four actors together to create innovation in EU.

Vice-President Jyrki Katainen, Commissioners Elżbieta Bieńkowska and Tibor Navracsics, highlighting that innovative regional strategies are to boost cooperation between EU regions in order to boost growth and competitiveness in Europe.



EC services jointly **launched the Smart Specialisation Platform for Industrial Modernisation**, along with the **S3 Platform for Agri-Food**, offering:

- hands-on support to regions to foster interregional cooperation based on **matching smart specialisation priorities** related to thematic sub-areas
- facilitating the creation an **investment pipeline of mature projects** in new growth areas across the EU, by providing tailored advice and helping regions establish links with the business and research communities.

### SMART REGIONS Conference

Driving Smart Specialisation Investments in Priority Areas for European Growth





## S3 Industrial Modernisation Platform

- Projects under SSP-IMI to use different EU funding instruments such as ESIF, COSME, Horizon 2020 and EFSI
- Ranging from projects of Common European Interest to projects funded under the SME Instrument
- The S3P on Industrial Modernisation is a Commission initiative launched jointly by DG REGIO and DG GROW, and supported by JRC S3 Platform

### **MoU BETWEEN DG REGIO AND DG GROW –**

Establishing A Smart  
Specialisation Platform On  
Industrial Modernisation and  
Investment

# 16-17 November 2016, Barcelona: Kick-off Event of the S3P on Industrial Modernisation

**216 registered participants from 22 member states and from over 60 regions with a good balance between authorities, research organisation, clusters (31%), enterprises**

Open to all European regions committed to industrial modernisation. The event aimed to bring together regions that have already submitted their expressions of interest in specific thematic partnerships as well as those willing to join these proposed partnerships, or interested in submitting new proposals for such interregional collaborations.



## First partnerships:

- Efficient and Sustainable Manufacturing
- Advanced manufacturing for energy related applications
- Bio-based materials
- De- and Re-manufacturing Pilot Network
- High Performance Production through 3D-Printing
- New nano-enabled products: The Vanguard Initiative
- Innovative Textiles in creative industries: ReTextile Europe
- Smart Engineering and Tooling
- SMEs integration into Industry 4.0
- Digital Services towards Industry 4.0
- **PS: More proposals have been received since then**



## Partnerships and EC support

**Analytical**

**Expert**

**Funding**



**Innovative textiles in creative industry**



**Smart tooling and engineering**



**Industry 4.0**



**New nano-enabled Products**



**High performance production through 3D Printing**



**Bio-economy**



**Efficient and Sustainable Manufacturing**



**Advanced Manufacturing for Energy Related Applications**



1

2

3

4

## workflow

**Setting up a thematic area**

**Mapping and matching**

**Design of projects**

**Business plan**

**Investment projects**

# Agro-Food related Priorities (based on priority descriptions)

European  
Commission

	Table : Agro-Food related sub-areas of specialisation (EU28)	count, n
1	Agro-food (new) technologies (incl. KETs and application of ICT in the field of agriculture)	62
2	Agro-food and Tourism	54
3	(Food) products & Organic food and food with higher added-value (healthy food, quality of life)	36
4	Water for Environment and Agriculture (incl. aquaculture, fisheries and maritime)	32
5	Food production, manufacturing and distribution	19
6	Environmentally-friendly agro-food production	18
7	Food safety and security	11
8	Research and Education in Food/Agriculture	2
9	Transport and logistics	2
*	(Generic) Agriculture as industry (agro-food)	36
	<b>Total</b>	<b>272</b>

# EU28: Agro-Food, Tourism and Digital Agenda (EU Priority level)

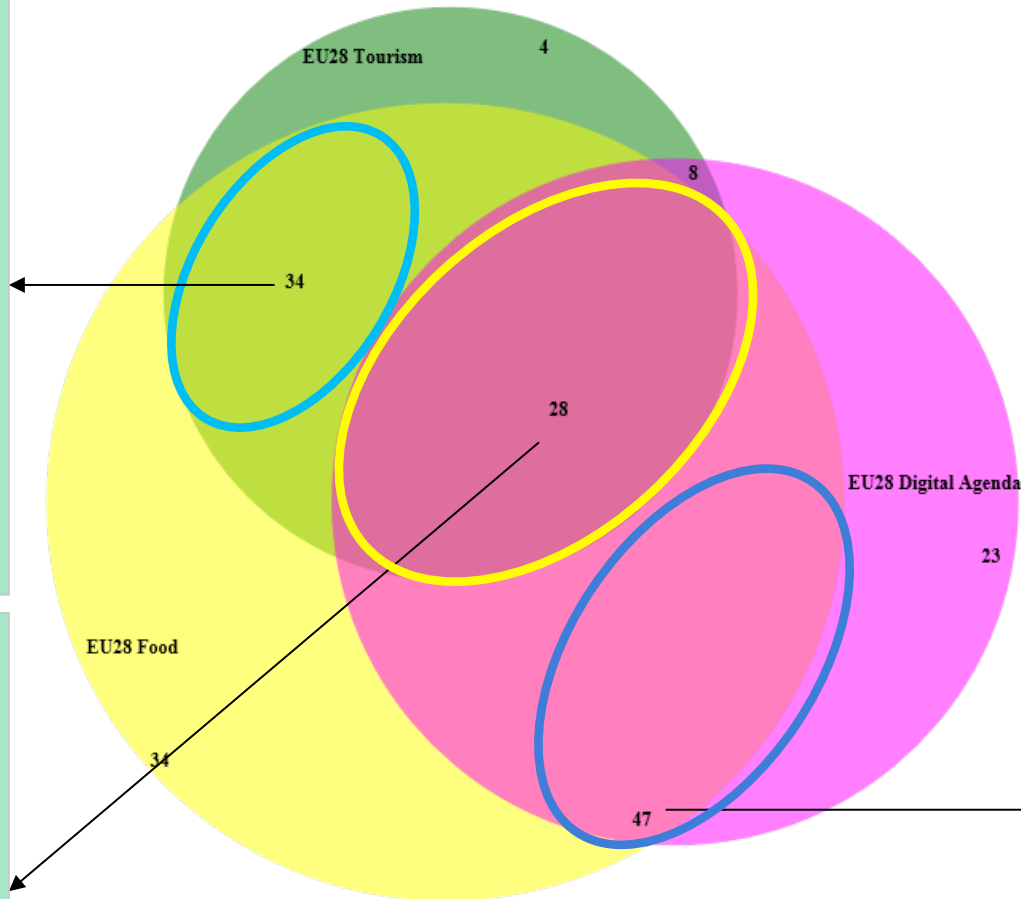
European  
Commission

## 34 matches (Tourism + Food):

Anatoliki Makedonia, Thraki  
Dytiki Makedonia Thessalia  
Ipeiros Ionia Nisia Sterea  
Ellada Peloponnisos Attiki  
Notio Aigaio Kriti Cantabria  
Comunidad Foral de Navarra  
Cataluña Región de Murcia  
Etelä-Karjala  
Provence-Alpes-Côte d'Azur  
Abruzzo Puglia Basilicata  
Calabria Sicilia Friuli-Venezia  
Giulia Lazio Friesland (NL)  
Swietokrzyskie Opolskie  
Warmińsko-Mazurskie  
Algarve Alentejo Região  
Autónoma da Madeira  
Hallands län  
**Slovenia** Scotland  
Kujawsko-Pomorskie

## 28 matches (all 3 areas):

**Cyprus** Brandenburg  
Denmark Midtjylland  
Nordjylland Dytiki Ellada  
Voreio Aigaio Galicia Aragón  
Castilla-La Mancha  
Extremadura Comunidad  
Valenciana Andalucía  
Canarias Kainuu  
Lappi Bretagne Martinique  
Réunion Molise  
Provincia Autonoma di  
Bolzano/Bozen  
Provincia Autonoma di Trento  
**Malta** Podlaskie  
**Portugal** Norte Centro (PT)  
Região Autónoma dos Açores



## 47 matches (Food Priorities + Digital Agenda):

Flemish Region Praha  
Moravskoslezsko Germany  
Nordrhein-Westfalen  
Baden-Württemberg  
Bremen Hamburg Hessen  
Mecklenburg-Vorpommern  
Niedersachsen Saarland  
Sachsen Sachsen-Anhalt  
Schleswig-Holstein  
**Estonia** Principado de  
Asturias Comunidad de  
Madrid Castilla y León  
Etelä-Savo Champagne-  
Ardenne Basse-Normandie  
Nord - Pas-de-Calais  
Alsace Franche-Comté  
Poitou-Charentes  
Auvergne Languedoc-  
Roussillon Corse  
Guadeloupe Guyane  
**Hungary Ireland** Valle  
d'Aosta/Vallée d'Aoste  
**Lithuania Latvia** Eastern  
Netherlands Western  
Netherlands **Poland**  
Łódzkie Lubelskie  
Podkarpackie **Romania**  
Västernorrlands län Wales  
Northern Ireland England





## **Call for expression of interest : proposals submitted until 25th November 2016 (varying degree of maturity)**

- High Tech farming (Tuscany, Italy)
- Traceability and Big Data - Smart-Food (Andalusia, Spain)
- Rural diversification and Smart Agri-Food destinations (Region of Central Macedonia, Greece and Noord-Brabant, Netherlands)
- Public meal as a driver of sustainability, health and innovation in the agri-food chain (Skane, Sweden)
- Nutritional quality of mass catering (South Ostrobothnia, Finland)
- Vanguard Initiative Bioeconomy Pilot - Agri-Food (VI)
- Sustainable development of production of field crops (adapted to the impact of climate change), second and third harvest (N-E region/Romania)
- From farm to fork (West region, Romania)
- Better food value chains, more resilient, transparent and competitive (Castilla y Leon, Spain)



## Kick-Off Event: Florence 6-7 December 2016 (Co-organised by S3 Platform & Region of Tuscany)

### Welcome and official opening

- EU Commissioner Phil Hogan with Video-message
- Marco Remaschi, Regional Minister for Agriculture of Tuscany Region
- D. Ricardo Domínguez García-Baquero, Vice-Consejero de Agricultura, Pesca y Desarrollo Rural de la Junta de Andalucía
- Rudolf Niessler, Director for "Smart and sustainable growth and Southern Europe", DG REGIO, European Commission

### S3P Agri-Food: Working arrangements

- Presentation of governance and operational arrangements for partnerships by Jan Larosse, DG Regio
- Presentation of support and advisory services by Iman Boot, DG Agri; Alexandra Tuijtelaars, DG RTD; Jan Larosse, DG Regio
- Vanguard Initiative pilot projects: process, achievements and challenges by Wim De Kinderen, South Netherlands
- Discussion and feedback

### Partnerships for Agri-Food

- Presentation about the Agri-Food Platform by Katerina Ciampi Stancova, JRC
- Presentation of the first candidate thematic partnerships: Traceability and Big Data (Andalusia) and High Technology Farming (Tuscany)
- Pitch Session: Rural diversification and Smart Agri-Food destinations (Central Macedonia and North Brabant), Better food value chains, more resilient, transparent and competitive (Castilla y Leon)
- Q&A

### Parallel sessions on thematic areas - Scoping notes for new partnerships, work flow in the proposed thematic areas and working arrangements:

Traceability and Big Data (Andalusia), High Technology Farming (Tuscany), Rural diversification and Smart Agri-Food destinations (Central Macedonia and North Brabant), Open space

### The role of ESI Funds and synergies with other instruments for trans-regional partnerships in Agri-Food

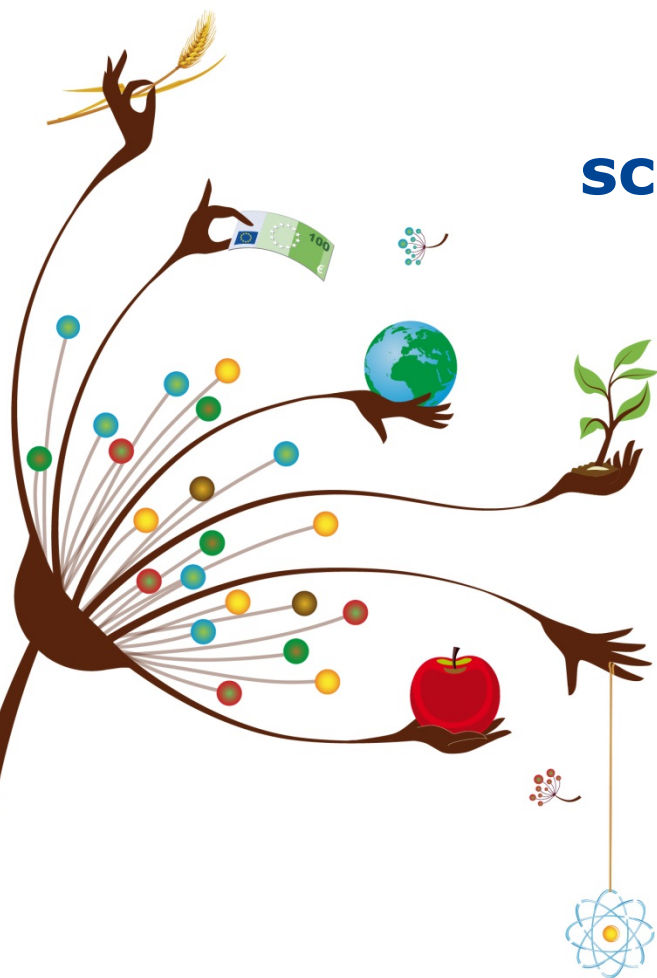
- Rural Development and sectorial crossovers for innovative Agri-Food projects in Tuscany by Roberto Scalacci, Director for Agriculture and Rural Development of Tuscany Region
- From learning to commercialisation: reflection on investment needs and funding models by Marcello Colledani, VI Pilot project on Efficient and Sustainable Manufacturing
- Panel Discussion with experts from European Commission services (Iman Boot, DG Agri, Alexandra Tuijtelaars, DG RTD), EIT (Katerina Sereti) and Interreg Europe (Magdalini Anagnostou).

### Reporting from the parallel sessions

- Work programmes and needs
- The way forward: Presentation of agreements and proposals

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## Smart Specialisation : from design to implementation

### In earlier stages ...

Focus on design: developing the concept, helping to understand the S3 method and producing a sound strategic design

### ...at this stage

Focus on implementing the strategies: project selection criteria, resources reaching beneficiaries, monitoring implementation, delivering results

### A new handbook that is:

- **Pragmatic**, i.e. building on policy-makers' needs and on field evidence
- **Useful**, i.e. a relevant supporting tool
- **Practical**, i.e. provides hands-on suggestions that are immediately applicable





## The Handbook structure

**1. The Entrepreneurial Discovery Process cycle: from priority selection to strategy implementation**

**2. Good governance: principles and challenges**

**3. From priorities to projects: selection criteria and selection process**

**4. Transnational co-operation and value chains**

**5. Monitoring**

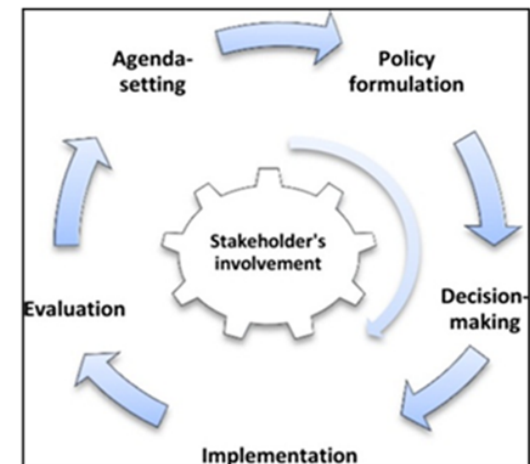
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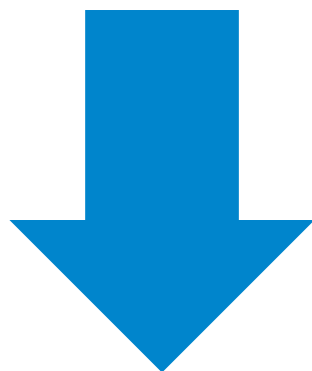
## The **Entrepreneurial Discovery Process (EDP)** cycle: from priority selection to strategy implementation

### Based on the EDP-practice so far

- **Consolidate the EDP...** as an interactive and inclusive process to:
  - Open new technological and market domains
  - Inform governments' policy and decision-making
- **...towards a concept** revealing new dimensions:
  - The cyclical nature of the EDP
  - The new role of government
  - The need to adapt to contextual factors
  - The local, regional, national or transnational structures for EDP



## Sustaining an inclusive and continuous EDP



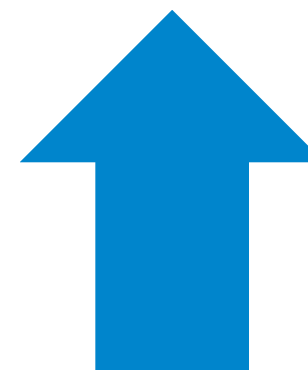
### Role of stakeholders – Trust and participation

- **Commit** to the strategic objectives identified in S3 strategies
- Engage in the **different stages** of the policy-making process



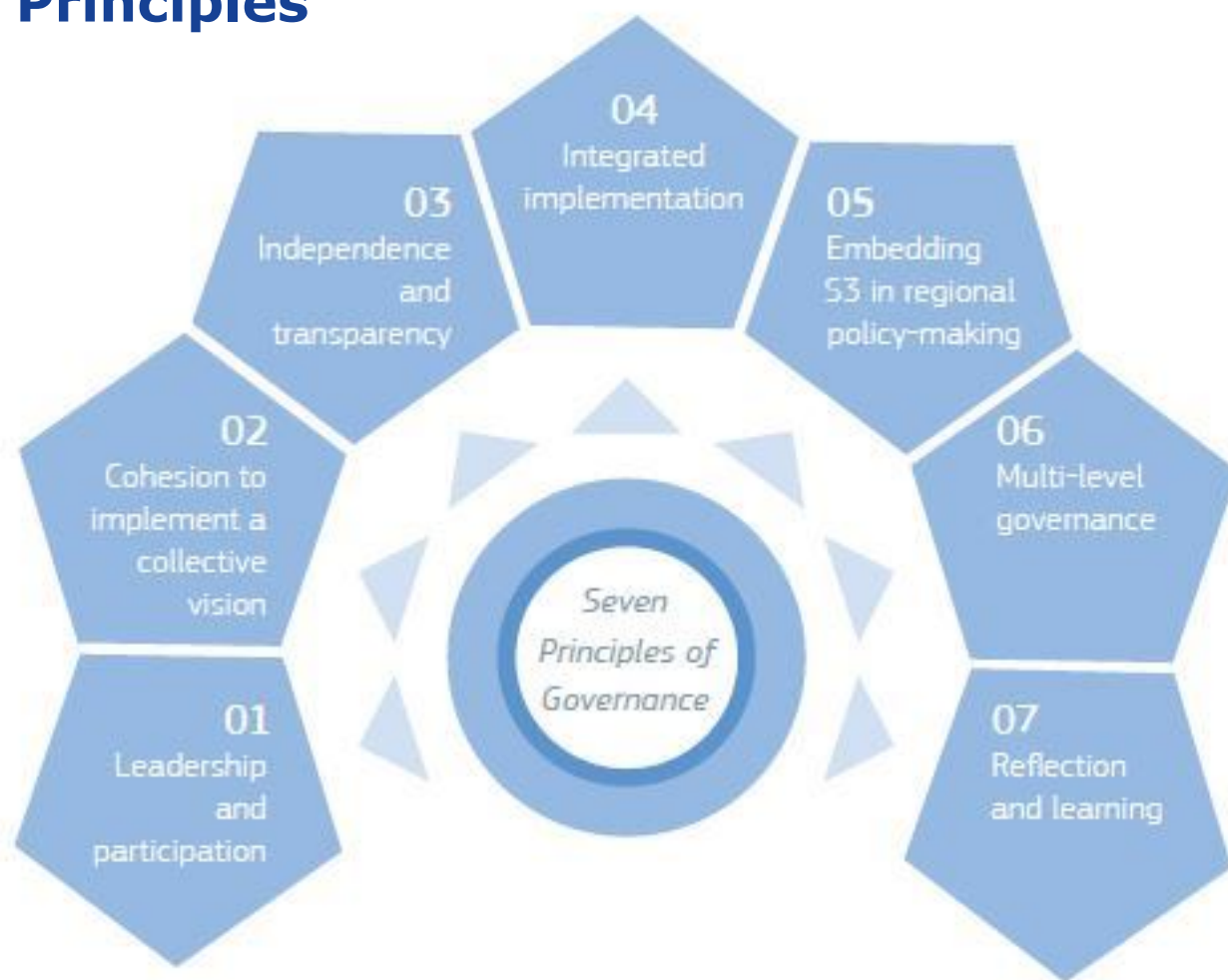
### Role of government – Inclusive governance

- Enable platforms for targeted **stakeholders' interaction** and policy coordination
- Build flexible structures and incentives to allow policies to **evolve and adapt** to a changing reality





## Good governance of S3: Seven Principles





## Messages on Governance

- **Good governance underpins the successful implementation of a Smart Specialisation Strategy (S3)**
- Governance arrangements can foster or frustrate the implementation of S3
- Effective strategies are not implemented exclusively by national or regional authorities, rather executive **power is shared with a variety of actors and networks, within and outside the region**
- As part of **public policy within EU cohesion policy**, the **public sector has a key role to play** in the implementation of initiatives that emerge from involvement with a variety of actors
- **Interaction and coordination between regions, territories and cities** with regard to regional/national S3 **are required** to avoid fragmentation and increase the impact of investments across Europe



## From priorities to projects: selection criteria and selection process

- What type of policies should be imbued by S3?
- How to select projects?
- What challenges need to be addressed for implementing S3 successfully?





## Messages on project selection

- S3 should be considered as an integral part of local RTDI policy
- Stakeholders' feedback on the selection process can improve or advance its results
- The economic impact for the regions and countries must be assessed in due course
- The selection of limited areas for investment may expectedly cause reaction from those who feel 'excluded' as well as from those who have been 'included'





## **Transnational co-operation and value chains highlights**

- From improving policy quality and effectiveness to integrating into global value chains
  - Instruments and frameworks facilitating different stages of S3 cooperation
  - Challenges faced by regions and countries expanding transnationally
  - S3 integrating local economies in global networks



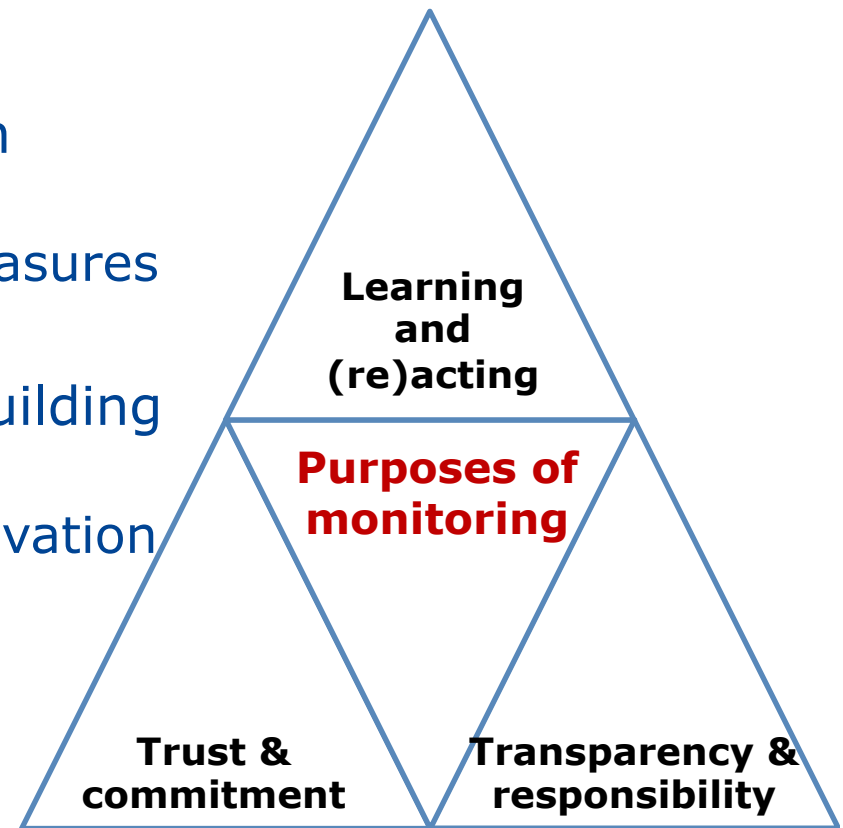
## Stages of transnational cooperation in S3



*Figure IV.1 Evolution of transnational collaboration*

## Monitoring system for S3

- Evolution & effects of transformation processes
  - Early warning to (re)orient policy measures
- Stakeholders participation & trust-building
  - Support the EDP
  - Provide intelligible narratives for innovation processes
- Condense & clarify the intervention logic of the strategy







## What monitoring should be?

### **Main characteristics of a monitoring mechanism should be ...**

- Result orientation
- Sustainability
- Replicability of policy cycles

### **... addressed through :**

1. Continuous & stable stakeholders' engagement → Continuous EDP
2. A network of institutional and stakeholder relationships that:
  - persists in time
  - continuously produces & reacts to information
  - evaluates results and provides feedback
3. A monitoring system integration geared to learning, trust-building and guaranteeing accountability





## **In a nutshell**

- 1. EDP should be a continuous process requiring inclusive governance, sustained stakeholders' commitment and participation*
- 2. Transnational learning can help regions to design better governance structures, but different regional contexts demand tailor made solutions*
- 3. S3 should be considered an integral part of local RTDI policy*
- 4. Transnational collaboration and learning are crucial for fostering economic growth*
- 5. Continuous stakeholder involvement and the provision for reorienting strategies underlines the importance of re-inventing monitoring*





## More Information

*Draft version – Forthcoming Handbook (not to be quoted):*

<http://s3platform.jrc.ec.europa.eu/s3-implementation-handbook>





## To sum up

- S3: a new approach to innovation for territorial development
- S3 platform is at your service
- From design to implementation, from specialisation to collaboration – thematic platforms
- A handbook to handle implementation challenges

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