The Challenge and the Opportunity of Smart Specialisation (RIS³) for Europe's regions: towards a new perspective in cluster policies

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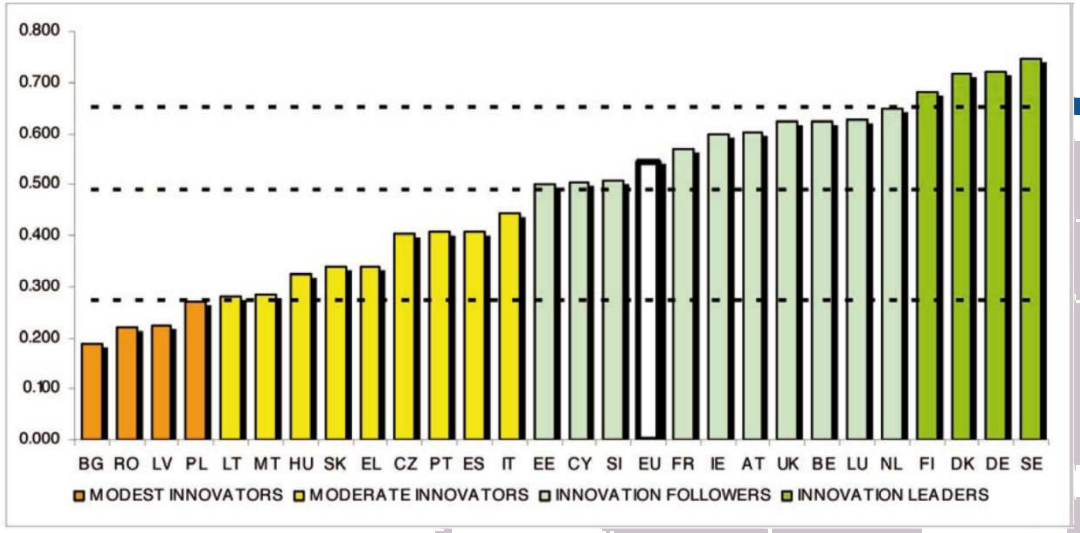
Setting the scene

- *The **knowledge economy** changes everything*
- ***Globalisation** has pushed the boundaries and changed traditional growth strategies*
- ***Global value chains** have redrawn the map for conceiving and producing products and services*
- *Countries and regions that are not able to adapt (will) see their economies being **marginalised***
- ***Global (re)positioning necessary** - Need for a new growth proposition based on knowledge assets*

Europe's innovation divide undermines competitiveness

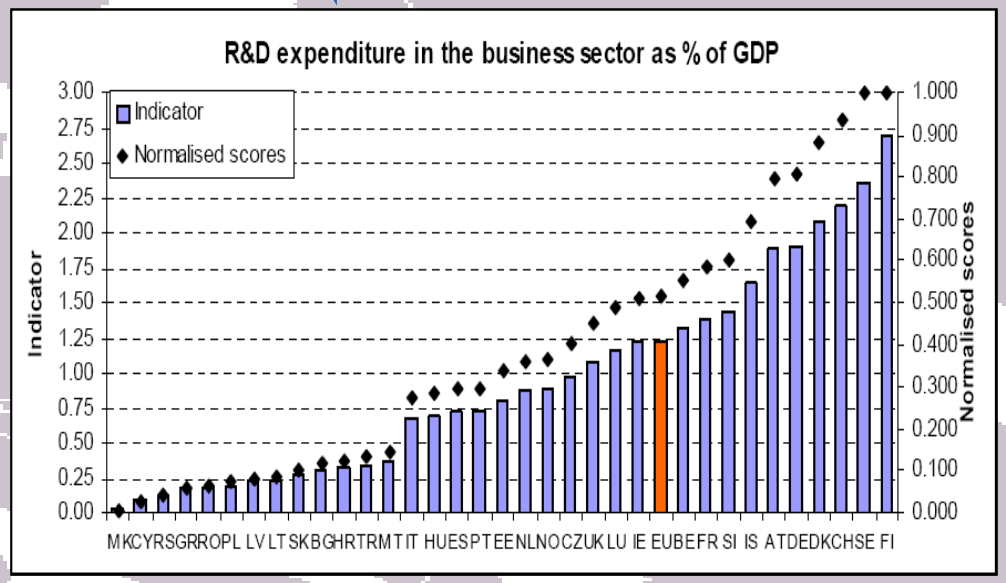
- *Large parts of the EU out of 'sync'*
- *Modest and Moderate Innovators holding back the EU as a whole*
- *Grand policy designs at risk without a sound and functioning base*
- *Identification of priorities and strategies of crucial importance – yet still, among the major bottlenecks*

Figure 2: EU Member States' innovation performance



Innovation performance (2012)

R&D expenditure in the business sector as % of GDP (2011)



How European regions invest in R&D

- Out of a total of 266 regions in the EU, only 35 had in 2009 an R&D intensity (R&D investment as a % of their GDP) above 3%
- Taken together these 35 regions accounted for 45% of all R&D expenditure in the EU
- 10 of the most R&D intensive regions in 2009 were located in the Nordic member States, totalising 9,3% of total R&D expenditure in the EU (source EUROSTAT regional yearbook 2012)

Turning the European Union into an Innovation Union

The Innovation Union flagship initiative aims at creating the best conditions for Europe's researchers and entrepreneurs to innovate

A broader approach to innovation:

- **Improving framework conditions for innovation to flourish**
- *meshing research and technological development with*
  - *Product innovation, service innovation, innovation in design etc.,*
    including process and organisational innovation
  - *Social innovation, public sector innovation, eco-innovation etc.*
  - *Exploration of new business models > Both technological & non-technological > Both incremental & disruptive innovation*

The promise of Horizon 2020, the new Framework Programme for Research and Innovation

- A core part of Europe 2020, Innovation Union & European Research Area:
  - **Responding to the economic crisis** to invest in future jobs and growth > **Addressing people's concerns** about their livelihoods, safety and environment > **Strengthening the EU's global position** in research, innovation and technology

Novelties

- A single programme bringing together three separate programmes/initiatives
- Coupling research to innovation – from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- Continuation of investment in frontier research
- Simplified access, for all companies, universities, institutes in all EU countries and beyond.

The new Cohesion policy
(ESIF – European Structural and Investment Funds)

- ESIF will focus on Europe 2020 objectives for **smart, sustainable and inclusive growth** / **list of 11 thematic objectives** for ESIF developed around the Europe 2020 priorities
- New regulatory provisions for thematic concentration (R&I part of the minimum 60-80% concentration for ERDF funds in more developed regions - 50% in less developed regions)
- Support to applied research and innovation for the purpose of regional socio-economic development
- Capacity building for innovation and growth through the promotion of innovation friendly business environments
- **Smart Specialisation – strategic approach to economic development through strategic support for R&I / *Ex-ante Conditionality* for the use of the European Regional Development Fund (ERDF) for any kind of R&D&I investments**

EU R&D and Innovation Policy future Horizon 2020	***EU Cohesion Policy***
Differences	
*Based largely on **individual R&D and innovation Projects** of a pre-competitive nature aiming at advancing knowledge and fostering innovation for growth and jobs, including but not exclusively frontier **research (also co-funding national and regional programmes)***	*Based on **multiannual Programmes** aiming to reduce regional disparities, including through **close to the market competitive R&D and innovation** efforts*
*Awarded **directly to final beneficiaries** (firms, public and private R&D centres and Universities, including national and regional governments in certain cases – Art. 185, ERA-NET etc.)*	*Awarded **through** shared management exclusively to national and regional **public intermediaries***
***Through transnational competitive calls** addressed to international groupings through peer review **based on excellence** criteria*	***Non competitive attribution** addressed to regional players **based on strategic planning** negotiation (however competitive calls possible and rising at national or regional level)*
Synergies and Complementarities	
***Horizon 2020** will focus on tackling major societal challenges, maximising the competitiveness impact of **research and innovation** (Industrial leadership) and raising and spreading levels of **excellence** in the research base*	***Cohesion policy** will focus on galvanising **smart specialisation** that will act as a **capacity building** instrument, based on learning mechanisms and the creation of critical skills in regions and Member States.*

Research and Innovation investment priorities for the ERDF

Strengthening research, technological development and innovation:

- *Enhancing research and innovation infrastructure (R&I) and capacities to develop R&I excellence and promoting centres of competence, in particular those of European interest*
- *Promoting business R&I investment, product and service development, technology transfer, social innovation and public service application, demand simulation, networking, clusters and open innovation through smart specialisation*
- *Supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production in Key Enabling Technologies and diffusion of general purpose technologies*

Keys to Synergies

- ✓ ***Smart Specialisation ex-ante conditionality***
- ✓ ***Thematic Concentration***

(both under Cohesion policy)

A backgrounder on Smart Specialisation (I)

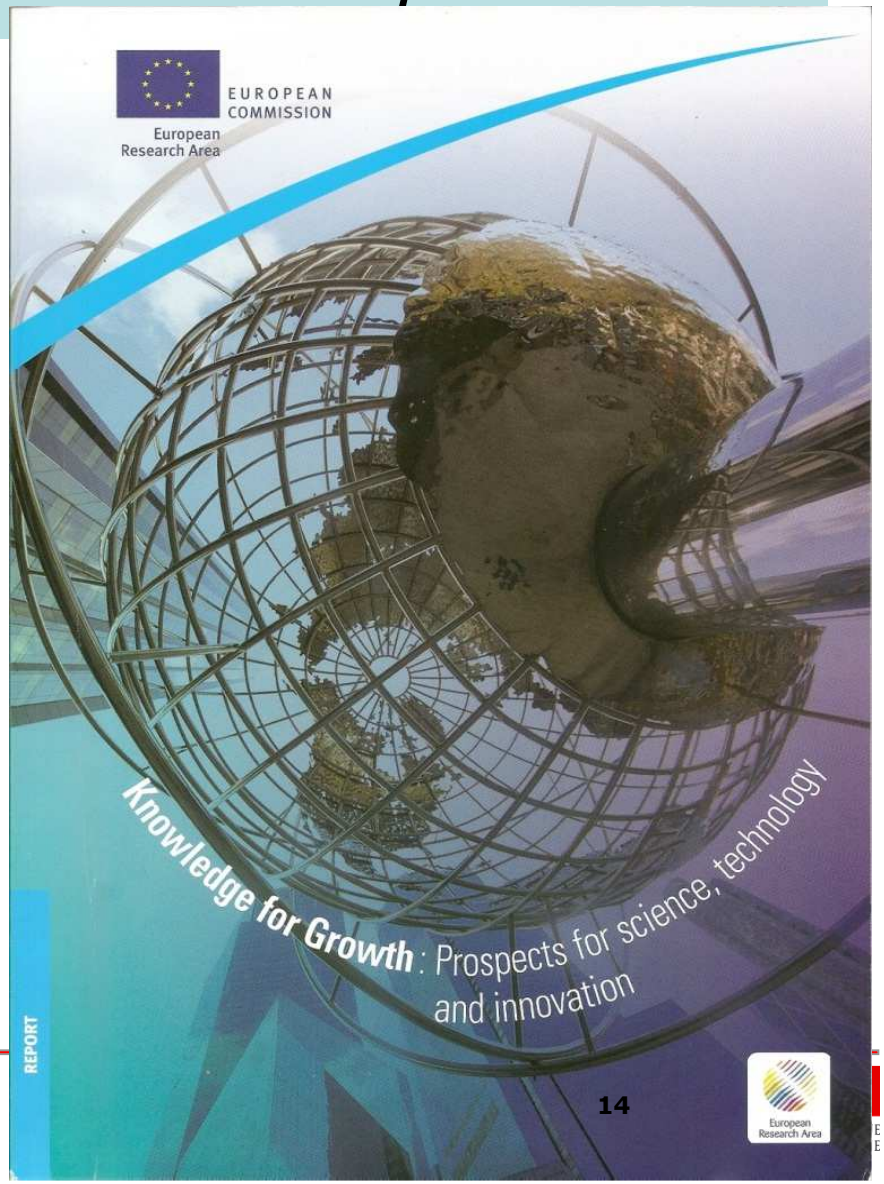
- *The concept of smart specialisation traces its origins back to the debate on the **transatlantic productivity gap**. Initially conceived by Dominique Foray and Bart van Ark, and later given additional impetus by other co -authors Paul David, Bronwyn Hall and by other members of the "Knowledge for Growth" expert group (2009).*
- *Transatlantic differences in R&D intensity used to explain differences in growth terms between USA and Europe reflected also on differences in the way new technologies diffuse in the broader economy, with a special emphasis on ICT. That was thought to explain largely the productivity differences observed.*

A backgrounder on Smart Specialisation (II)

- *Concept of smart specialisation central to economic development and growth policy*
- *A central pillar of the Europe 2020 Strategy (see also Flagship Initiative Innovation Union [COM(2010)546] and the EU Budget Review [COM(2010)700]*
- *A central element in the development of a reformed European Cohesion Policy, which is based on the principles of 'smart', 'green', and 'inclusive growth'.*
- *Regions / MS are required to identify the sectors, technological domains, where they would seem to have competitive advantage, and then to focus their regional development policies so as to promote innovation, based in these fields. This development would then be rooted on knowledge assets.*

D.Foray, P.A. David and B.Hall : *Smart Specialisation: the Concept*

***Knowledge for Growth* expert group for the EC**



A simple idea (KfG brief no 9, 2009)

- *"It should be understood at the outset that the idea of smart specialisation does not call for imposing specialisation through some form of top-down industrial policy that is directed in accord with a pre-conceived "grand plan". Nor should the search for smart specialisation involve a foresight exercise, ordered from a consulting firm.*
- *We are suggesting* ***an entrepreneurial process of discovery that can reveal what a country or region does best in terms of science and technology****. That is, we are suggesting a learning process to discover the research and innovation domains in which a region can hope to excel. In this learning process, entrepreneurial actors are likely to play leading roles in discovering promising areas of future specialisation, not least because the needed adaptations to local skills, materials, environmental conditions, and market access conditions are unlikely to be able to draw on codified, publicly shared knowledge, and instead will entail gathering localized information and the formation of social capital assets."*

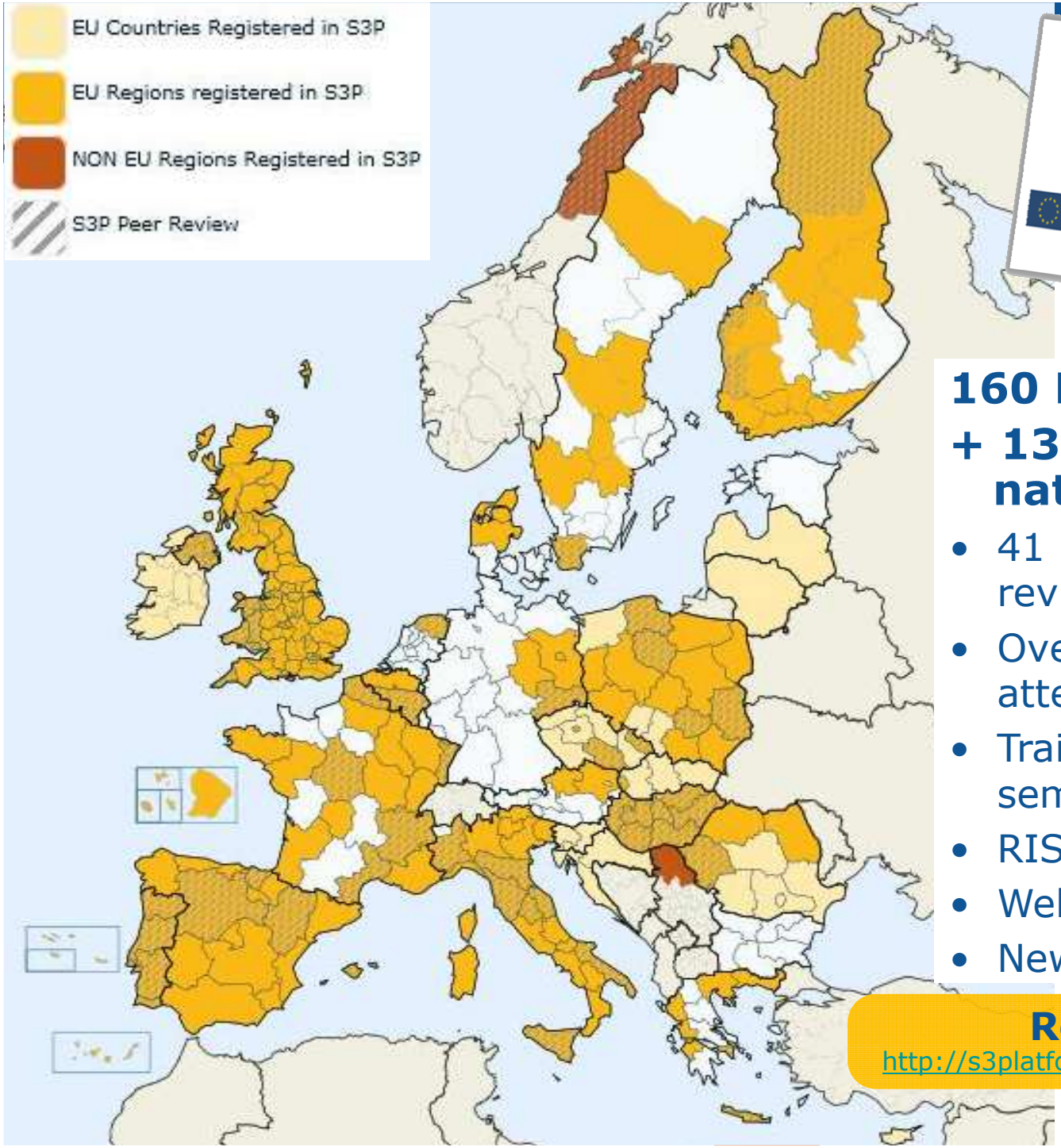
Smart Specialisation is not what you usually think it is

- *It is not about pure specialisation – since this involves huge risks about potential lock-ins*
- *It is not about selecting and favouring only a few sectors – but this might be an intermediate stage*
- *It is rather about identifying the new opportunities that often emerge at the intersection of existing sectors and technologies – the target of the "entrepreneurial discovery process"*

Key points on Smart Specialisation:

- *Stimulate innovation through* ***entrepreneurship, modernisation, adaptation***
- ***Dare to introduce innovative governance solutions***
- ***Think about strategic technological diversification*** *on areas of relative strength and potential*
- ***Increase diversification – promote new linkages, synergies and spillovers***

Adapted from Philip McCann (2012)



SMART SPECIALISATION PLATFORM

160 EU regions (from 19MS)

+ 13 countries at national level

- 41 regions + 4 MS peer-reviewed
- Over 110 other regions attended workshops
- Trainings, thematic seminars
- RIS3 guide
- Web-site
- Newsletter …

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

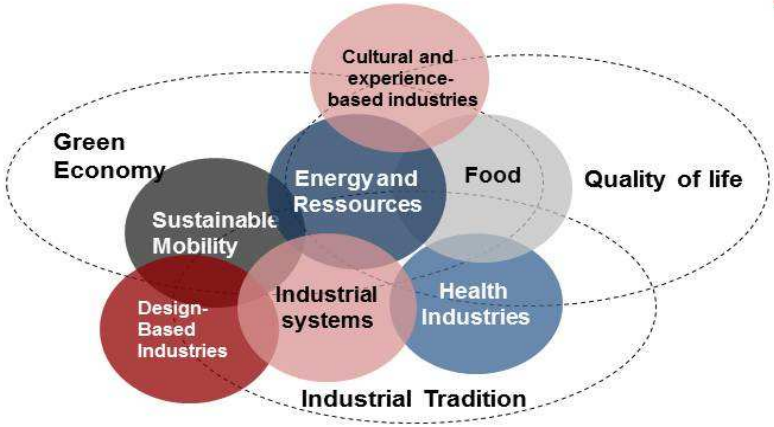
European Commission

Smart Specialisation Strategies (RIS3): What we have seen in the submitted Operational Programmes (Oct.2014; Rough Typology

- **'Specific' RIS3:** New document prepared in light of ex-ante conditionality, at least taking account of RIS3 guide and support of REGIO/RTD experts (NL, ES, FR, IT, PT).
- **Existing 'Research'/'Innovation' or equivalent strategy** Single document (AT, DE, BE) or group of existing documents (DK, EE, SE, Wales)
- **Existing strategy + RIS3 summary/update**: (FI, IE)
- **Action plans** annexed to Partnership Agreement or relevant Operational Programme(s). Varying level of detail and deadlines (regulation allows until 2016 but most in 2015).

RIS3CAT

Pillar 1. Leading Sectors



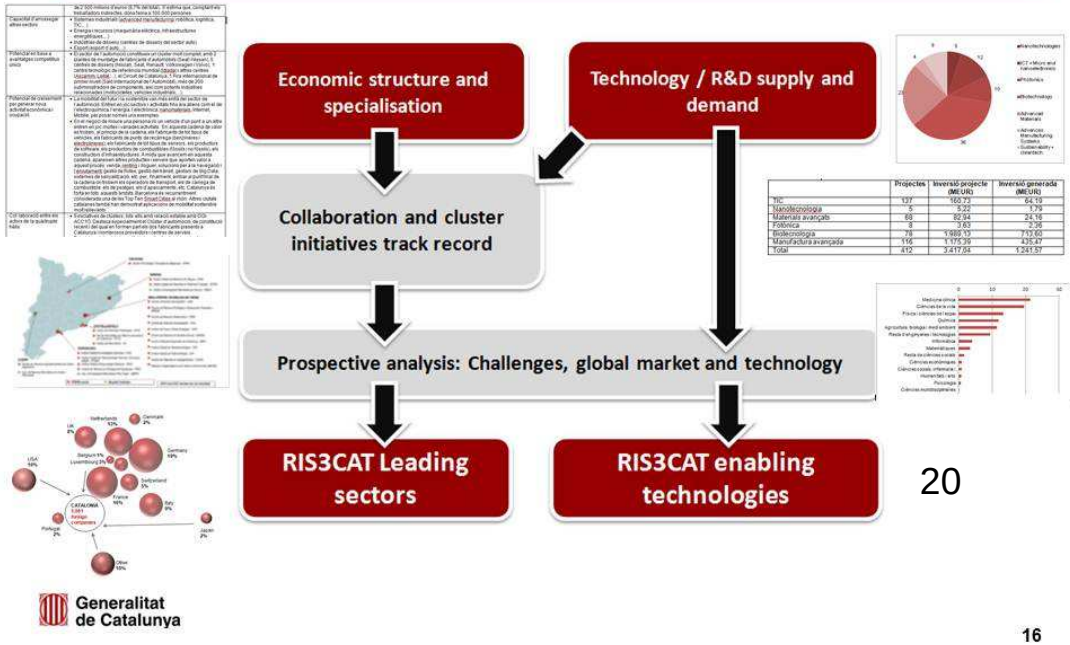
- RIS3CAT identifies seven leading sectors in which Catalonia has competitive advantages, critical mass and future opportunities.

Generalitat de Catalunya

RIS3: The Catalunia case

RIS3CAT

Qualitative and quantitative analysis



Generalitat de Catalunya

Export Group Findings:
Clusters and Smart Specialization

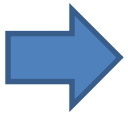
Dr. Christian Ketels, Harvard Business School

WIRE Conference
Cork, Ireland, 6 June 2013

This presentation is based on the work of the Expert Group on the role of clusters as vehicles for smart specialization in European regions, set up by DG Research & Innovation. Members of the group were Christian Ketels (chair), Claire Nauwelaers (rapporteur), Jennifer Harper Thymos, Göran Lindqvist, Beata Lubicka, and Frank Peck.

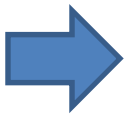
Key Questions

- Confusion about the relation of the **concepts**



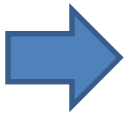
- How are S3/RIS3, clusters, and cluster policy conceptually related?

- Role of **cluster policies in S3/RIS3**



- What key challenges of S3/RIS3 can good cluster policies help to address?

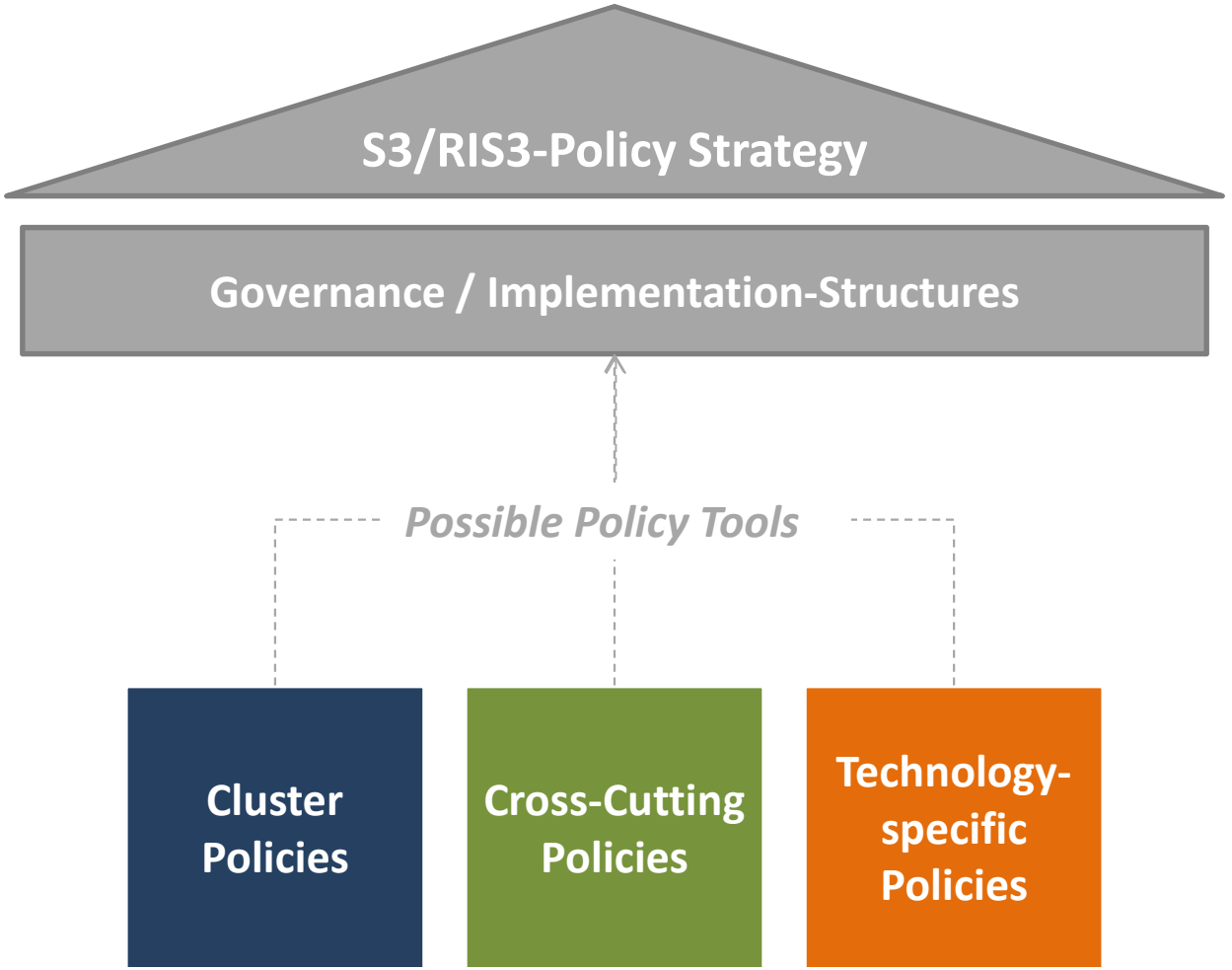
- **Better practices** of cluster policies



- What are key features of good cluster policies?

Courtesy Expert Group on Clusters and Smart Specialisation, EC 2013

The Role of Cluster Policies in S3/RIS3



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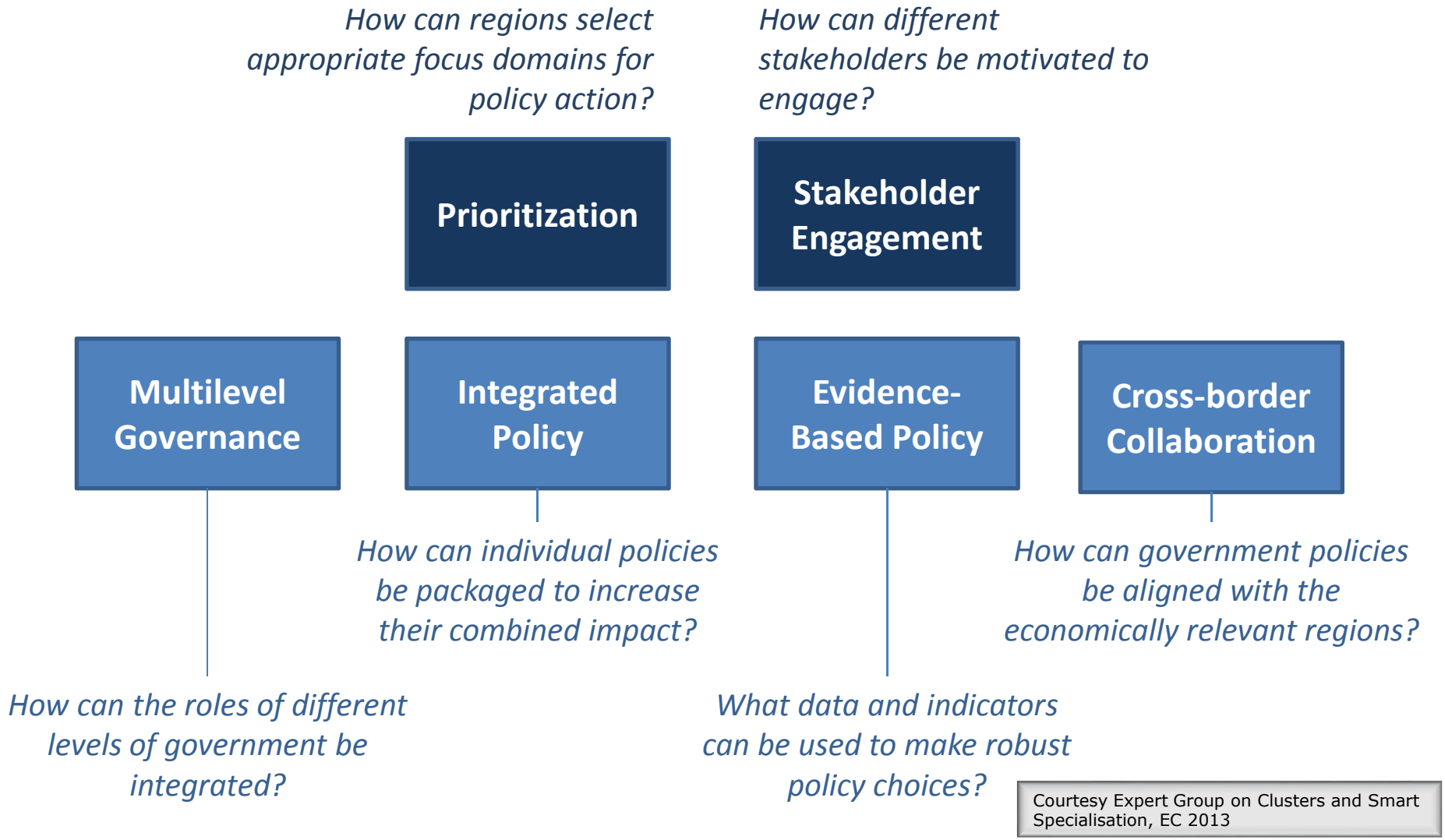
The Role of Cluster Policies in S3/RIS3

Key Leverage Points



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The Role of Cluster Policies in S3/RIS3

Key Leverage Points

	Potential of Cluster Policy	Reality of Cluster Policy	Beyond Cluster Policy
Integrated Policy	• Clusters are naturally suited to organize the design and delivery of integrated policies	• Policies often fragmented and focused on single issues	• Cross-cutting policies for business environment upgrading needed as well
Evidence-Based Policy	• A range of cluster-specific data and analytical tools is available	• Limitations in existing cluster data; use of data often ad-hoc	• Cross-cutting regional data is needed as well and is only partially available
Multilevel Governance	• Clusters draw on multiple levels of policy	• Limited actual collaboration across levels of government	• Important multi-level issues are cross-cluster
Cross-Border Collaboration	• Cluster boundaries are defined by their economic reach	• The geographic footprint of cluster organizations is often administratively set	• Important cross-border issues are cross-cluster

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Better Practices
Learning from Cluster Policy Experience

Activities

- Action agenda addressing the cluster's specific needs
- Strengthening local buzz and global pipelines
- Systematic exploration of opportunities at boundaries of the cluster
- Systematic tracking of goals, activities, and impact

Organization

- Businesses in the driving seat
- Professional cluster management

Policy context

- Cluster policies integrated into a wider regional development strategy
- Cluster policies aligned to the functional region of the cluster
- Cluster policies informed by sound evidence base and robust evaluations

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Implications for the European Commission
Support for Cluster Policies

- How should the EC support cluster efforts?
  - Trans-regional learning on cluster policies (continue)
  - Data infrastructure on clusters and cluster policies (continue, but need new)
  - More specific cluster policy tools for different clusters/regions

- What are implications for EC-funded programs?
  - Open funding programs for cross-border cluster efforts
  - Connect clusters to technology platforms

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Major issues on planning ahead

- *Structural deficiencies in the planning authorities at national and regional level*
- *Absorptive capacity*
- *Difficulties of small players in integrating global innovation value chains*
- *Difficult or non-existent cooperation between universities and the business communities*
- *Spiral of marginalisation and lack of ambition*
- *Huge gaps in research and innovation investments correlate with gaps in innovation performance*

- ***Commission response**: emphasis on better planning tools and on institutional networking with no compromise on excellence*

European Commission

Thank you!

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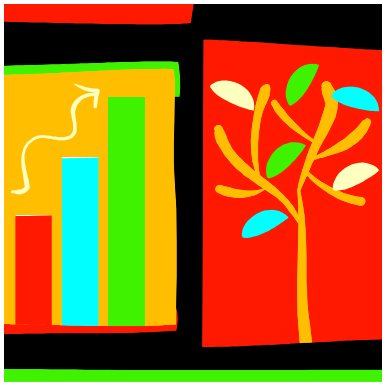

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