



Regional innovation strategies for smart specialisation: RIS³



Final Conference

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Why is Regional Policy an ally of innovation?

- Innovation is one of the most fundamental processes underpinning economic growth...The innovation process requires significant and appropriate public policy support to secure the social benefits it can deliver”
 - ‘SMEs, Entrepreneurship and Innovation’ - OECD, 2010
- A paradigm-shift occurred in Cohesion Policy in 2007-2013: 86 billion (25% of the total) of which 65 billion from the ERDF were allocated to innovation



Innovation for creating high-skilled jobs in Europe

- New products and services can be developed by anyone, not only scientists
- Europe, in its modern 27-nation form, provides a natural laboratory for the new kind of collaborative innovation
- These days, big companies destroy jobs to become more productive. Young companies by contrast are the engines of job creation
- Public bodies need to be agile, open and fluent in the ways and means of collaboration
 - *Anthony Williams, the Lisbon Council, 2010*



Why the regional dimension?

“Both global economic growth and social cohesion require increasing the competitiveness of regions, especially where potential is highest. The comparative advantages that drive innovation and investment are as much a regional characteristic as a national one. For regions to succeed, they must harness their own mix of assets, skills and ideas to compete in a global market and develop unused potential.”

OECD (Conclusions of the Chair, High level Meeting, Martigny, Switzerland, July 2003)

“Proximity is important in fostering innovation. When different aspects of manufacturing – from R&D to production to customer delivery – are located in the same region, they breed efficiencies in knowledge transfer that allow new technologies to develop and business to innovate. Historically the co-location of manufacturing and product design has been vital”

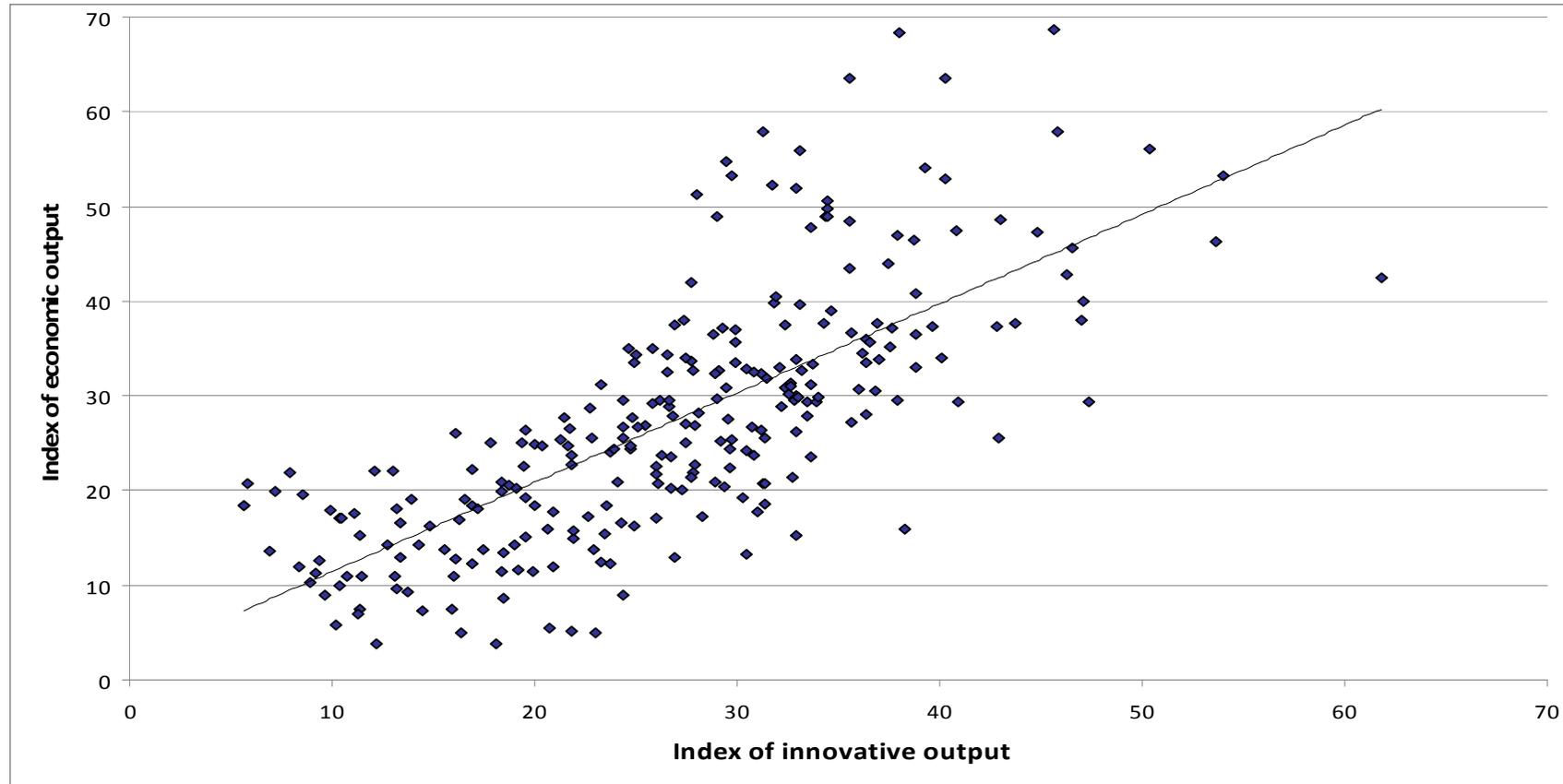
*« Report to the President on ensuring American leadership in advanced manufacturing »
Executive Office of the President, June 2011.*



Is there a link between innovation output and regional growth?

"...in the last 50 years innovation has been responsible for at least half the economic growth of our nation..."

(Neal Lane, Director National Science Foundation - NSF, February 1997, Seattle, U.S.A)

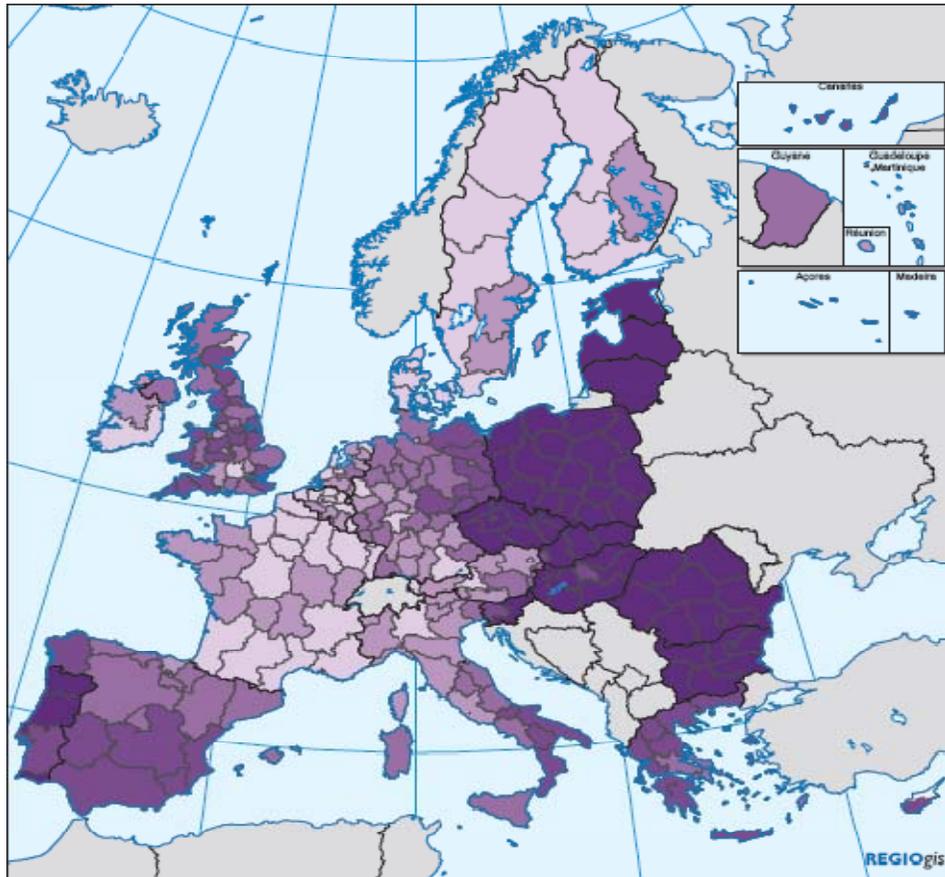


Source: Mikel Navarro et al, Basque Competitiveness Institute 2010.

"Until the 1980s, technology and innovation were under recognised influences in the explanation of differences in the rates of economic growth between regions in advanced industrial nations..." (Townroe)

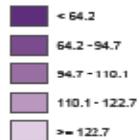


Productivity



GDP per person employed (EUR), 2008

Index, EU-27 = 100



(EU-27 : 5,517 eurworker)
IT: 2007

Source: Eurostat



© EuroGeographics Association for the administrative boundaries

| | | |
|------|--|-----|
| UKI1 | Inner London | 323 |
| UKM5 | North Eastern Scotland | 215 |
| LU00 | Luxembourg (Grand-Duché) | 206 |
| NL11 | Groningen | 204 |
| FR10 | Île de France | 182 |
| BE10 | Région de Bruxelles-Capitale / Brussels Hoofdstedeli | 173 |
| IE02 | Southern and Eastern | 168 |
| SE11 | Stockholm | 160 |
| DK01 | Hovedstaden | 156 |
| BE21 | Prov. Antwerpen | 153 |
| | | |
| RO22 | Sud-Est | 24 |
| BG41 | Yugozapaden | 23 |
| RO31 | Sud - Muntenia | 22 |
| RO41 | Sud-Vest Oltenia | 20 |
| RO21 | Nord-Est | 16 |
| BG33 | Severozitochen | 16 |
| BG34 | Yugoiztochen | 14 |
| BG31 | Severozapaden | 13 |
| BG32 | Severen tsentralen | 12 |
| BG42 | Yuzhen tsentralen | 12 |



An experimental phase with RIS on which to build...

- ❖ A **Regional Innovation Strategy** provides opportunities for regional authorities in partnership with the private sector, universities and technology providers, to develop within their regions a set of activities to increase innovation capacity
 - ✓ 1994-1999: First pilot actions with RIS and RISI and then RIS+. RIS: use
 - ✓ 500.000 € for 18 months to plan and identify new projects

- ❖ 2000-2006: Regional programmes of innovative actions (0.4% of Structural Funds)
 - ✓ 3 priorities: technological innovation, information society, sustainable development
 - ✓ 3 networks: ERIK, IANIS+, Sustainable Regions

- ❖ 2007-2013: ERDF priority: Encourage innovation, entrepreneurship and the growth of the knowledge economy. No separate budget lines for community initiatives / pilot projects / innovative actions as in the past.



Policy lessons from experimentation with Regional Programmes for Innovative Actions (RPIA)

Key Conclusion

- ✓ The innovative actions led to **an appreciable impact in all regions assisted** and in a number of cases this impact has led to sustained structural changes to the way regional policy is designed and delivered.
- ✓ However, initially **'stronger' regions made the most** out of the additional ERDF funding, while **less developed regions struggled to sustain partnerships** and hence results from the programmes.



Departing from Regional Innovation Strategies: learning lessons

- ✓ Excessive dependence from external consultants lacking the tacit regional knowledge, regional actors and businesses?
- ✓ Lack of understanding of the economic ecology and types of economic production?
- ✓ Excessive focus on "technology transfer" ?
- ✓ A lack of understanding of the regional innovation system as an interaction of interdependent players, policies and institutions?
- ✓ Lack of matching of scientific and technological specialisation?



Innovation Strategies for Smart Specialisation: RIS³

An economic transformation agenda based on 4Cs:

- **(Tough) Choices:** select few priorities on the basis of international specialisation and integration on international value chains
- **Competitive (Constructed) Advantage:** mobilize talent by matching RTD + i and business needs & capacities
- **Critical Mass:** provide arenas for related variety/cross-sectorial links which drive specialised technological diversification
- **Collaborative Leadership:** efficient innovation systems as a collective endeavour based on public-private partnership (quadruple helix)



What can we do about it?

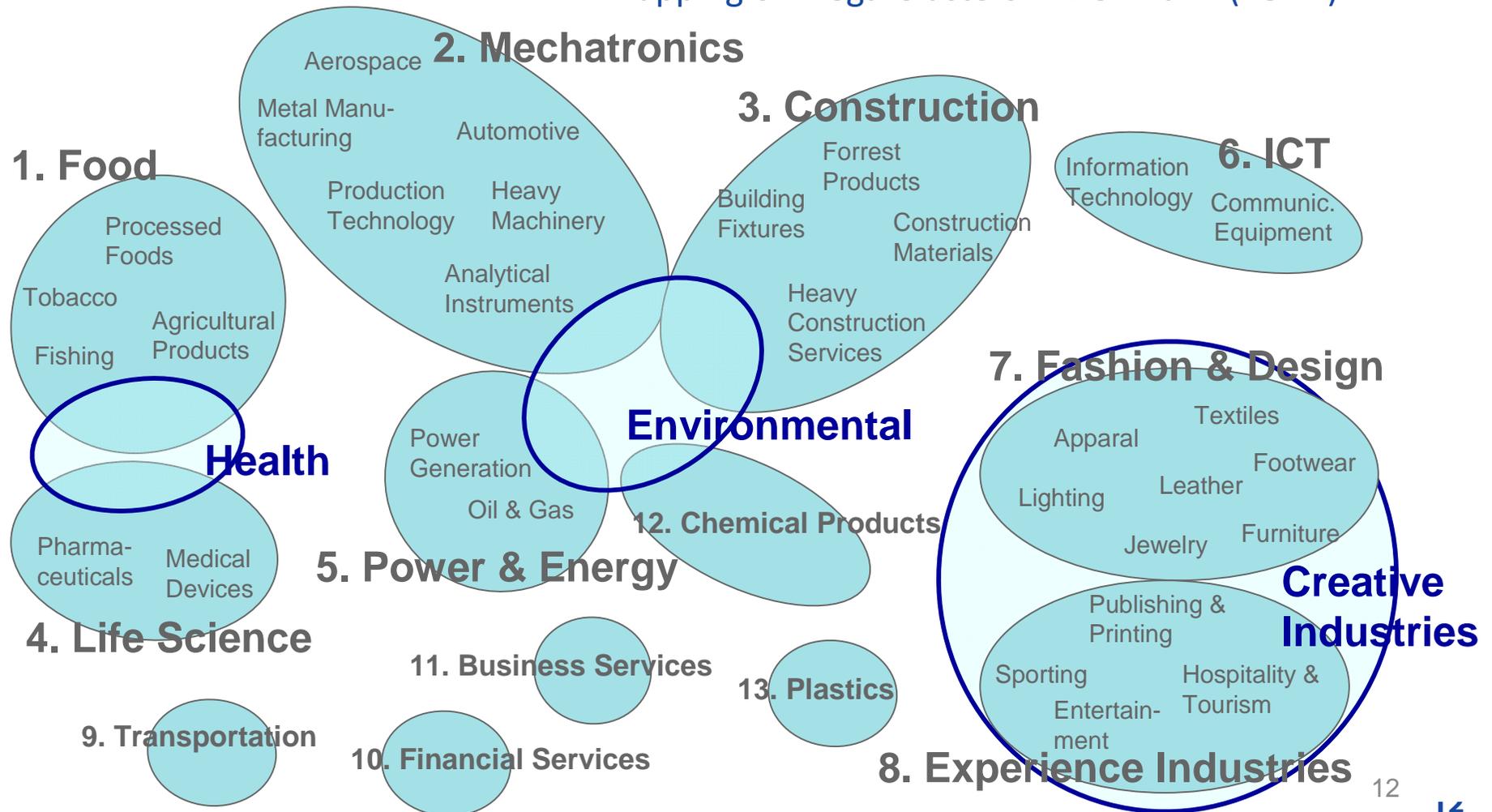
- ❑ Making (hard) choices and defining a regional vision: Defining where regions wants to go in terms of competitiveness through innovation.
- ❑ Focusing minds, efforts and (scarce) public resources on the development of a limited number of thematic or (cross) sectoral innovation priorities in each region.
- ❑ Identify factors of competitiveness (critical mass) and bottlenecks, support key enabling technologies, and concentrate resources on key priorities.
- ❑ Not about picking winners but using activities that are **embedded in the region** to jump to others of higher value added
- ❑ Enhancing our financial engineering schemes

“An entrepreneurial and dynamic process of discovery, based on strategic intelligence, interaction and policy learning” D. Foray



New types of specialisation emerging from existing competences: Denmark

Mapping of Mega-Clusters in Denmark (FORA)





Future Cohesion Policy

- For 2013-2020 the proposal of the Commission include the ex-ante conditionality to produce national/regional innovation strategies for smart specialisation.
- Regions and Member States must revisit their innovation strategies or start the process to design them....*Now*



Will SCINNOPOLI be useful?

- To be smart these strategies will have to use and develop processes of self assessing, monitoring and reporting
- SCINNOPOLI, through hard-work, has develop a series of Regional Action Plans with in-built learning that is valuable to inspire regions and evaluators
- These RAPs must be publicized and made available to a wide public.



What can we do now?



- jrc-ipts-s3platform@ec.europa.eu



How to join?

- Go to the website and:
 - Designate the department/body and persons that will be responsible for the work on smart specialisation strategies;
 - Send a chart/diagram illustrating the bodies and responsibilities regarding the drafting and coordination of innovation strategies including names and contacts (in this diagram the national/regional coordination should be clarified if relevant for the country);
 - Develop a 'portal' or webpage in the relevant department/body to 'communicate' with the region and link to the S3 portal;
 - Use SF technical assistance or other financial resources available for these actions

- search areas ■
- scientific actions ■
- ports web sites ■

Smart Specialisation Platform (S³Platform)



News:

- » **Kent (UK) and Weser-Ems (DE)** are the latest regions to register with the S³ Platform.

What is smart specialization?

Smart specialisation is an important policy rationale and concept for innovation policy. It promotes efficient, effective and synergetic use of public investments and supports countries and regions in strengthening their innovation capacity, while focusing scarce human and financial resources in a few globally competitive areas in order to boost economic growth and prosperity. It concentrates resources on the most promising areas of comparative advantage.

It aims to harness regional diversity by avoiding uniformity and duplication. It combines goal-setting (EU

Quick links...



- [Activities of the S³Platform](#)
- [Useful documents and links](#)
- [Forthcoming events](#)
- [Toolbox links](#)
- [Register to the S³Platform](#)
- [Who are we? / Contact us](#)
- [Registered regions](#)



What for?

- ✓ To develop conceptual and practical knowledge on regional smart specialisation
- ✓ Aiming at supporting the process, in each region, to revisit its innovation strategy or to draft a new one
- ✓ Gathering regions to support peer review of strategies



Who runs the S³ Platform?

- The platform is run by a **steering team** gathering representatives of several Commission Services: REGIO, EMPL, RTD, ENTR, EAC, INFISO, SANCO, CLIMA, AGRI and the JRC.
- The steering group started its activity in January to prepare the list of actions and launching of the Platform and meets regularly every month.
- A **mirror group** was set up: for advise and follow-up
- High-level experts, representatives of Networks and bodies (e.g. EURADA, ERRIN, UEAPME, EBN, OECD, European Cluster Observatory, European Cluster Alliance, ERIS@, etc.) It will meet every three months.



Areas of Work

- ✓ By the end of 2011: 11 permanent staff in the Platform with highly qualified staff with academic and practical experience in this field.
- ✓ Development of the website: registration of the regions
- ✓ The guide innovation strategies for smart specialisation
- ✓ OECD group
- ✓ Working groups for regions (several countries)
- ✓ Training events for regions
- ✓ Conferences, Work Shops



Guide innovation strategies for smart specialisation RIS³



1. Smart specialisation: The policy rationale
2. The process: Developing the Governance bodies
3. The ten steps to design a RIS3 strategy
4. Peer review and monitoring of the strategies
5. Horizontal issues in RIS³: the branches
6. Case studies



Horizontal issues in RIS³: the branches

- ✓ Green Growth: only sustainable is smart – Eco-innovation & Energy efficiency
- ✓ Digital agenda: enabling knowledge flows throughout the territory –connected regions
- ✓ Clusters for regional growth: business ecologies that drive innovation
- ✓ Innovation-friendly business environments for SMEs: good jobs in internationally competitive firms
- ✓ Social Innovation: new organisational forms to tackle societal challenges
- ✓ Stronger focus on financial engineering: not only grants
- ✓ Lifelong Learning in research and innovation: support knowledge triangle (KICs) and university-enterprise cooperation
- ✓ Key Enabling Technologies: systemic potential to induce structural change
- ✓ Research infrastructure/centres of competence: support to ESFRI and EU wide diffusion of leading edge R&D results
- ✓ Creativity and cultural industries: innovation beyond technology and outside manufacturing
- ✓ Public Procurement for market pull: pre-competitive PP to open new innovation friendly market niches



Policy Delivery Instruments



Methodological support

Smart Specialisation GUIDE

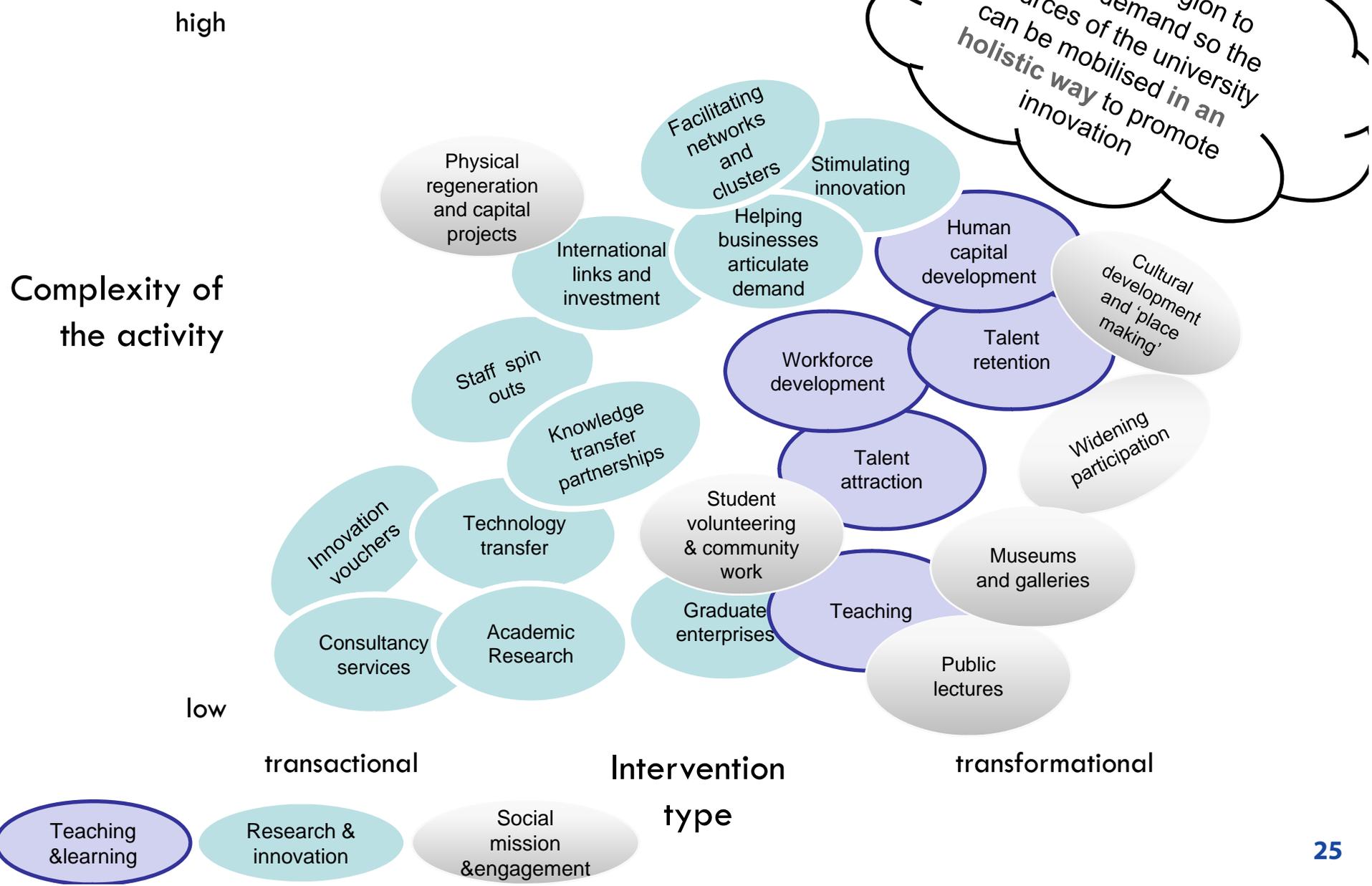
- Innovation Union self-assessment tool
- Regional Innovation Monitor
- OECD 2011 "Regions and Innovation Policy Directory EURADA "No-Nonsense" S³
- Diagnostic Systèmes d'Innovation (Prague)
- Innovating Regions in Europe RIS Guide

Policy Rationale

- (COM) "The contribution of Regional Policy to smart Growth"
- (COM) "The contribution of Regional Policy to sustainable Growth"
- Innovation Union Flagship

Economic Rationale

- "Knowledge for Growth"
- FWP Evaluation
- Innovation Systems
- Evolutionary Economics
- Policy Experimentation
- RIS-RITTs 1994-2004

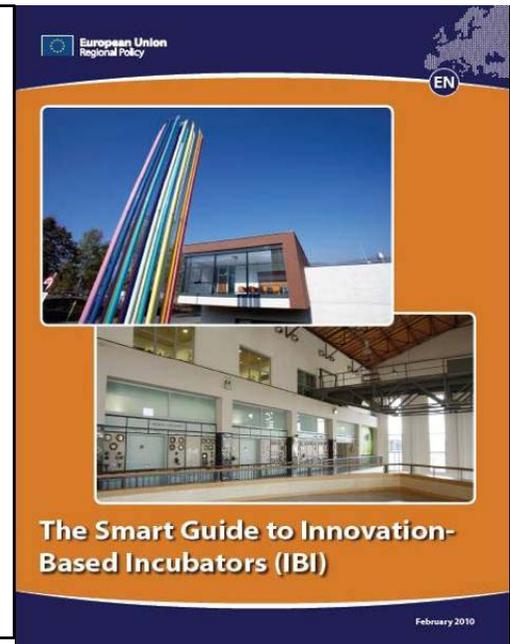




Research infrastructure/centres of competence

Smart Guide to Innovation-Based Incubators (IBI) published by DG REGIO/ENTER based on 25 years of incubation experience in the Union

- Business and Innovation Centres for new entrepreneurs and SMEs that intend to develop innovative ideas.
- European Business Network started by the Commission in 1984 and continuously supported by nearly 15 years: 100 BICs created between 1984 and 1998.
- Support services to entrepreneurs, helping them to transform into reality their innovative business ideas, and the delivery of tailored services to existing SMEs, aimed at modernising and innovating them.



“To achieve a sustainable social market economy, a smarter greener economy...the EU needs to provide more attractive framework conditions for innovation and creativity...we need technical support to promote the incubation and growth of small innovative firms...”

“European Union 2020 Strategy” COM 647 (2009)



Specialisation and Technopoles in Lower Austria

- ✓ *Lower Austria has gone through extensive prioritisation processes thanks to several strategic exercises since the mid-nineties. In 1998, a project for the continuous improvement of its regional innovation system started.*
- ✓ *Three 'Technopols' were launched 5 years ago in the areas where the region has a competitive advantage: Biotech and regenerative medicine; Environmental biotechnology and agrobiotechnology; and microsystems engineering, tribology and medical systems technology*
- ✓ *Resilience to the crisis and advanced competitiveness*



The Economic Impact of Technopols in Lower Austria

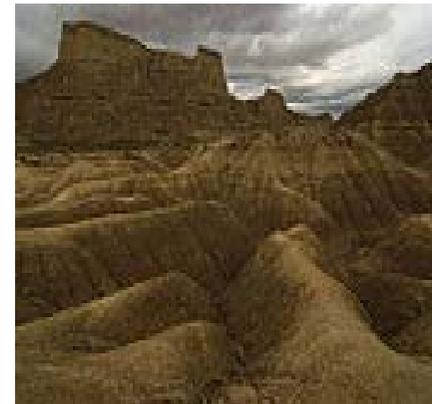
(Research Report by ECONOMICA Institute of Economic Research, Vienna)

<http://www.ecoplus.at/>



Examples: Macro-sectors and focus on education and talent in Navarra

- ✓ *Navarra's modernisation strategy was launched to maintain and improve not only its regional competitiveness and GDP per capita, but also its human development and its environmental sustainability levels by 2030.*
- ✓ *'Moderna Navarra ' integrates more than 90 pre-existing plans and aims to lead the regional structural transition from an industry-based economy to a knowledge-based economy.*
- ✓ *Navarra's government played a pivotal role in providing the impulse for developing the strategy, in particular by facilitating the coordination of the main academic, business, social and political actors.*
- ✓ *Niche sectors, such as bio-medicine or medical appliances, have been identified as specialisations. Regions with similar sectors were visited, in order to learn from them and to develop niche specializations while trying to avoid duplications.*





Examples: Bremerhaven (DE)

- Economy based on shipbuilding & commercial fishing in strong downturn end of 1990's
- Selection of 'offshore wind energy' as new development: clear & integrated industrial strategy and clustering of competencies
- Strong existing synergies between 'shipyard' & 'offshore wind' sectors
- Now Bremerhaven = major hub of offshore wind in DE, 4 major manufacturers, already 1,000 jobs created





Example: Spearhead initiatives and clusters in Flanders

- ✓ *By 2020 Flanders aims to rank among the top five knowledge-intensive regions in Europe.*
- ✓ *Steps given towards a transformational policy approach. This focuses on value chains, economic clusters, open innovation and ‘grand projects’, which are selective investments in future-oriented domains with a high innovation and growth potential and large societal impact.*
- ✓ *Six clusters in knowledge-intensive fields selected*
- ✓ *30 high-priority technology domains in which Flanders could be leading by 2015 in Europe and in the world identified by panels of experts from industry and knowledge institutions based on positioning and Delphi analyses.*

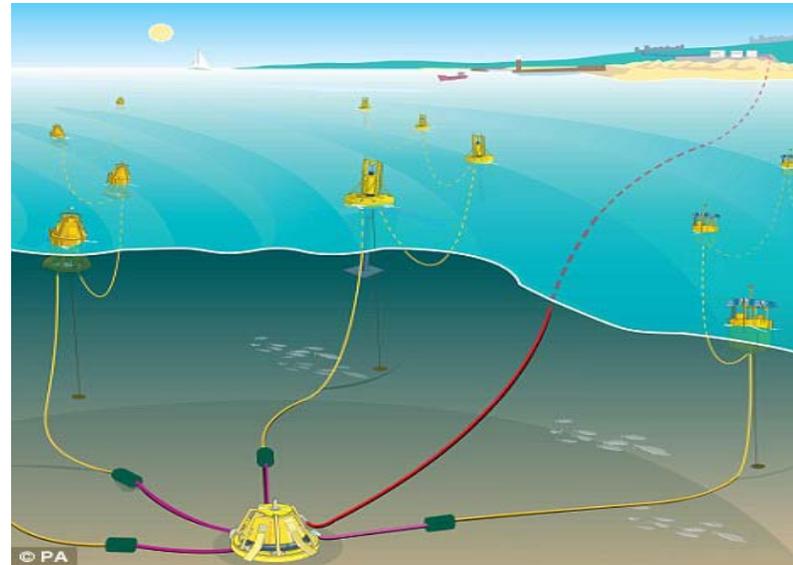




Smart Specialisation in Cornwall

An excellent natural portfolio:

- Solar irradiation
- Geo-thermal energy
- Wind energy
- Maritime resource for electricity
- UK's first wind farm 1992



The Wave Hub Sept. 2010: up to 50MW with 55 m€ (22.95 m€ ERDF)





Innovation-friendly business environment for SMEs

“Knowledge Vouchers: Tickets to success”, NL

IRE Award for best European Scheme

Limburg Regional Technology Plan 1997- 08' ERDF pilot

Pioneering an innovative, hands-on approach to knowledge transfer for SMEs.

- SMEs entitled to a number of consultancy or research days, and allow for visiting large, knowledge providers besides the universities (companies, research and educational institutions).
- Huge impact on the province – improving money flows, solving problems and creating opportunities and boosting cross-border cooperation (NL, BE, DE).



« Policies need to distinguish clearly between a few highly innovative and high growth potential firms and the great majority of SMEs, reflecting the different ways in which they innovate. The different needs can be characterised by a distinction between Science, Technology and Innovation mode of innovation on the one hand, focused on R&D and breakthrough innovation and Doing, Using and Interacting mode of innovation on the other, focused on incremental innovation in the « ordinary » SME. Both must be encouraged » (OECD, 2010)



Social Innovation

MICRO FINANCE INSTITUTE in Sweden, "Make Women Bankable" (Regiostars winner 2010)

Region: East Mid – Sweden (SE)

Funding: € 993,020 of which € 339,403 in EU funding (ERDF)

- **Focus: the specific situation of improving access to finance for migrant women, for whom it can be challenging to find collateral finance, guarantees, produce credit histories etc. Therefore they are often regarded as not bankable.**
- **The project has set up a Microfinance Institute and permanent mobilisation platforms, designed support structure before and after business start up, and developed a loan fund of approx. €480 000 (SEK 5 000 000).**



« Social Innovations are innovations that are social both in their ends and in their means. Specifically, we define social innovations as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations »



Stronger focus on financial engineering

ACHIEVE MORE, UK:

- ❑ A Joint Venture (Rivers Capital Partners & E-Synergy) to invest M€ 20 in 75 to 100 companies over the next 5 years: €8.5 M from the ERDF JEREMIE programme
- ❑ A high leverage effect: an additional M€ 11 from Angel Investors across the UK.
- ❑ Approach: evaluation of the variety of funding mechanisms used around the world
- ❑ Results: a tool which ventures quicker (6 -10 weeks) helps in the selection of ventures that deserve funding to get them early market revenues.
- ❑ Replication: this model will be followed for the European Creative Industries Alliance and the European Mobile and Mobility Industries Alliance

