

« Innovation and research priorities of the Structural Funds: Smart Specialisation Strategies”

STRAT.AT plus Conference
"Regional dimension of innovation in view of programming 2014
Organised by the OEROK (Oesterreichische Raumordnungskonferenz)
30 May 2011 (Neukirchen / Großvenediger - Austria)

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Regional Policy and EU 2020 Smart Growth

- Regional Policy is now at the heart of delivering smart growth in Europe 2020: a major potential means of implementing strategy on the ground in all the EU, contributing to improved governance.
- Guidance necessary for Managing Authorities in Member States and regions on how to optimise the impact of Cohesion Policy funding allocated to innovation
- Regional dimension to the Innovation Union: invites all regions to design 'smart specialisation strategies' - S³ to unlock growth.
- Need for a more effective and synergetic use of public funds and at making better use of financial engineering, with a focus on SME.

“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’ - p. 15. OECD, 2010)

Objective: aligning Cohesion Policy with Europe 2020

- ❑ Improve framework conditions for Innovation by aligning ERDF support with EU 2020 National Reform Plans
- ❑ Promote efficient regional innovation systems and open innovation – beyond narrowly defined technology aspects
- ❑ Increase Innovation capacities in regions, businesses in particular, through public-private partnership and strengthening links to Universities and R&D capacities: “triple helix” – “knowledge triangle”
- ❑ A paradigm-shift in Cohesion Policy 2007-2013: 86 billion for innovation with more than half still available for allocation to operations.
- ❑ Avoid duplication and imitation: no « one size fit all » policy recipes

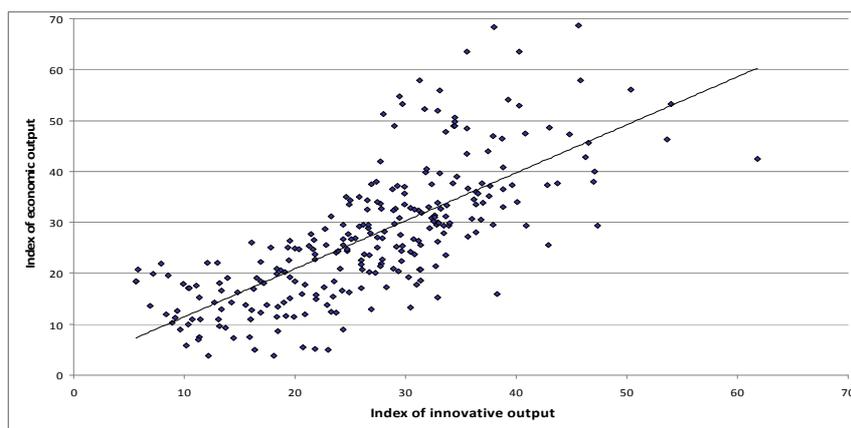
«Innovation can not be dictated but it can be cultivated »

*(The Federal Government and the growth of Regional Innovation Clusters,
J. Sallet et Al, 2009)*

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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.

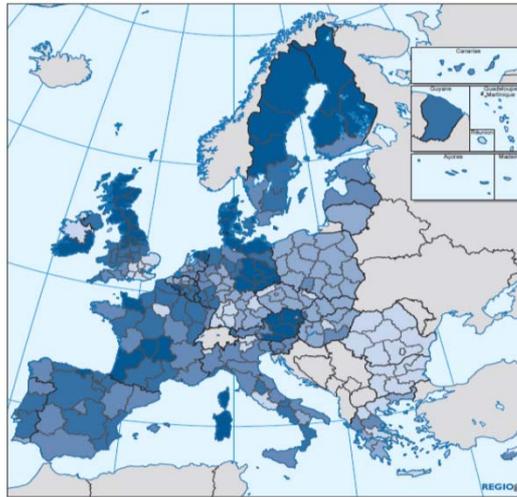
"Until the 1980s, technology and innovation were under recognised influences in the explanation of differences in the rates of economic growth between regions in advanced industrial nations..." (Townroe)

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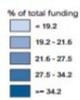
Cohesion Policy Funding for RTD and innovation 2007-2013

Cohesion Policy support for Innovation:

- 4% in 89'-93'
- 7% in 94'-99'
- 11% in 00'-06'
- 25% in 07'-13'



Planned investments of Cohesion Policy in RTD, innovation, enterprise environment, 2007-2013



EU27 = 33.9
Funding for RTD, innovation and enterprise amounts to some 475 billion
Source: DG REGIO

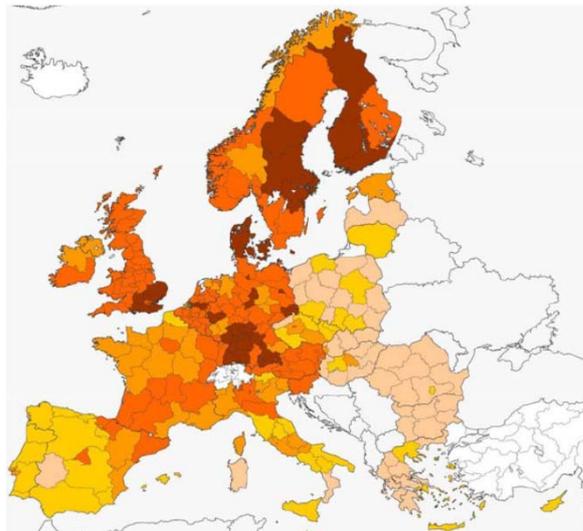
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© EuroGeographics Association for the administrative boundaries

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Regional Innovation Scoreboard - 2009

See: <http://www.proinno-europe.eu/page/regional-innovation-scoreboard>



- High innovators
- Medium-high innovators
- Average innovators
- Medium-low innovators
- Low innovators

« In EU 27, 52% of enterprises reported innovation activity between 2006 and 2008. Among them 34% cooperated with other enterprises, universities and public R&D institutes... »
(Eurostat, 6th Community Innovation Survey, November 2010)

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Further recommendations

- ❑ More effective and synergetic use of public funds (ERDF, FP7, CIP, national and regional funds);
- ❑ Make more extensive use of financial engineering, (loans, guarantees, revolving funds, VC);
- ❑ Increase ERDF use for transregional cooperation (Art. 37) to promote research and innovation;
- ❑ Make better use of public-procurement for innovation;
- ❑ Use more peer-review and independent experts for assessing/evaluating Innovation strategies and programs;
- ❑ Use ERDF to fund shortlisted FP7 and CIP projects;
- ❑ Make better use of the possibilities of collaborative and interactive policy learning across regions.

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Actions to be considered in S³

- ✓ Clusters for regional growth: business ecologies that drive innovation
- ✓ Innovation-friendly business environments for SMEs: good jobs in internationally competitive firms
- ✓ Stronger focus on financial engineering: not only grants
- ✓ Lifelong Learning in research and innovation: support knowledge triangle and university-enterprise cooperation
- ✓ 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
- ✓ Digital agenda: enabling knowledge flows throughout the territory – connected regions
- ✓ Public Procurement for market pull: pre-competitive PP to open new innovation friendly market niches
- ✓ European Innovation Partnerships: innovation through cooperation

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Clusters for regional growth

- ❑ European Cluster Alliance: <http://www.proinno-europe.eu/project/eca>
- ❑ Cluster Innovation Platform: <http://www.europe-innova.eu/web/guest/cluster-cooperation/cluster-innovation-platform>
- ❑ European Clusters Observatory:
<http://www.clusterobservatory.eu/index.php?id=1&article=25>

Cluster links over Europe (CLOE, Karlsruhe 2005):

www.clusterforum.org/en/about_cloe.html

- ❑ Pilot project of the Regions for Economic Change initiative - Good mixture of developed and less favoured regions.
- ❑ Development of an action plan for each of the 11 regions.
- ❑ Sustainable impact on the institutional regional actors in the "cluster scene" + the entrepreneurs who want to go international;
- ❑ Transnational contacts between clusters continue after the conclusion of this project, 20 clusters + initiation of many activities under FP7 Regions of Knowledge and CIP programmes.
- ❑ Budget: €1.808 million (€800,000 ERDF)



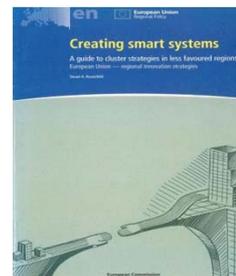
« Approximately 20% of all European Cluster Programmes in the EU were financed by Structural Funds... » (Oxford Research 2008, « Cluster Policy in Europe »)

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Clusters for regional growth

Cluster Cooperation in Northern Central Sweden: a major "testing lab"

- ❑ An answer to a demand by local companies and the result of a bottom-up process. Agents between people and organisations to generate ideas and provide potential for new business opportunities.
- ❑ The cluster organisations in Northern Central Sweden: Critical success factors by creating an infrastructure for project development and developing interaction between corporate research and universities.
- ❑ ERDF: € 1.302.000



“ 38% of all European employees work in industries that concentrate regionally – in clusters... The focus of cluster programmes needs to shift from capacity building... towards a clear orientation on excellence, focusing on clusters with the ability to upgrade in the face of global competition and ensuring the consistent provision of public knowledge infrastructure...”

(European Cluster Policy Group – Final recommendations – A call for Policy Action 2010)

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Innovation-friendly business environment for SMEs

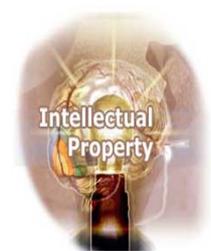
ifex: Initiative for Start-ups and Business Transfer – Baden-Württemberg, DE (European Enterprise Awards Winner in 2006)

- ❑ Online portal for start-up and business transfer policies, giving access to 1,400 providers to tailor-made educational and support services to specific target groups (schools, universities, women, ethnic and minority groups).
- ❑ A permanent Unit in the State Ministry of Economic Affairs and managing the nation-wide “German Agency for Women’s Start-ups” on behalf of three federal Ministries.



Units for Intellectual Property Promotion (UIPP) PT, ERDF (2001-2007)

- ❑ Bringing the National Patent Office closer to companies and universities. Services to researchers, students and to SMEs for pre-diagnosis of IPR needs.
- ❑ Training, awareness activities and seminars, IPR advertising and dissemination, technical assistance and advice by specialists.
- ❑ Partnerships network between 2 business associations, 10 universities, 7 technological centres and 3 science and technology parks.
- ❑ 2001-2007: the number of hi-tech patent applications to EPO per million inhabitants increased from 0.4 to 7.5 in PT (European Innovation Scoreboard).



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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)

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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



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Lifelong learning and University-enterprise cooperation

“In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed” (Charles Darwin)

Innovation Assistant Programme, Lower Austria, AT (2002):

- ❑ Encouraged SMEs to include a strategic orientation in their business plans with help from newly graduated students (University of Applied Sciences).
 - ❑ Until March 2007 the programme funded 52 Innovation Assistants. Average cost for each action: 30,000 € (contributed by ERDF and regional funds).
 - 60% of the SMEs a permanent post 'innovation assistant' was kept;
 - 80% of the SMEs developed one or more new products during the project;
 - 70% of the SMEs had increasing turnover based on the innovations;
 - A significant number of new firms have grown and reached international markets in 2-3 years;
- Results were passed on to 10 other regions through ERIK (ERDF funded network).



The Prince of Wales Innovation Scholarships, U.K. (POWIS)

An innovative £11.4 million initiative (University's Global Academy) bringing together the private sector in Wales, higher education and bright young graduates from anywhere in the world.

- ❑ Each scholarship worth £100,000: part-funded by ERDF through the European Union's Convergence programme administered by the Welsh Assembly Government, private sector investment and the University of Wales.
- ❑ The scheme will provide 100 world-class graduates to Welsh businesses between 2009 and 2014, supporting them through a programme that is amongst the best financially supported PhD packages in the world.

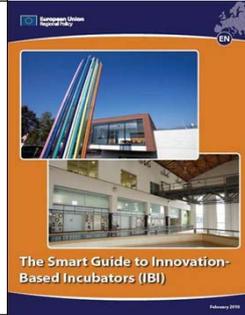


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Research infrastructure/centres of competence

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)

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Creativity and cultural industries

Berlin, DE: regional revitalisation through creative industries (2008)

- ❑ Kreativ Coaching Centre (KCC) in Berlin, established in 2008 and supported by ERDF;
- ❑ Helps emerging entrepreneurs in creative industries by providing individual assistance: experienced coaches, qualified in business administration and creative industries, who offer advice and expertise to young and growing companies to solve their problems in a non bureaucratic, hands-on way.



Debrecen, HU – Creative Industry Incubator

- ❑ The university of Debrecen set up a Creative Industries Incubator in 2009
- ❑ Hosted in a former Soviet Army Camp (transformed into a top-notch facility offering offices, attractive operation conditions, access to high-tech equipment).
- ❑ By February 2010 85% of space was rented out to young and start-up companies as well as spin-offs from the University at well below market rates
- ❑ The incubator proved to be highly popular particularly among high-tech ICT for which it provides a steady flow of knowledge and human resources from the university, which is next door.



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Design for user-centred innovation

Design support for SMEs, De Montfort Univ., East Midlands, UK

- Design support: generation of over 40 commercial products and created over 50 new jobs for regional SMEs over the past 5 years.
- Partnerships with regional design consultancies and universities to meet the needs of SMEs.
- An € 800 000 ERDF grant which provided a 7.5 x return on investment with respect to GVA increase and increasing as more products are brought to market.



The SEE project ('Sharing Experience Europe – Policy, Innovation, Design' (ERDF INTERREG IV C)

- A network of 11 organisations sharing knowledge for developing new thinking, disseminating good practice and influencing local, regional and national policies for design and innovation.
- Members from UK, BE, DK, EE, FI, FR, IE, IT, PL, SI, ES and their regional governments committed to exploring improvements in the delivery of innovation, entrepreneurship and design through individual or joint policies



“When the arts are integrated with business and science, they can influence solutions and productivity: Creative design provides a way to add a value to products in niche markets. That value is rooted in the aesthetic or emotional appeal of these products to certain markets, which can create a brand loyalty”.

(‘Unveiling the Creative Economy in Arkansas’ 2009, Regional Technology Strategies Inc.)

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Digital agenda

- Cohesion policy strongly supports investments in ICT: Total financial allocation of BEUR 15 i.e. 4% of the total Cohesion support;
- 2010 Strategic Report: many regions struggle to absorb ICT funds due to lack of skills and experience in planning and implementing ICT measures.
- **DDG REGIO/INFOS, EU guide on Broadband implementation 2011:** to provide reliable and independent guidance for broadband investment to Managing Authorities at regional and local level.

3 FAST TRACK Networks: http://ec.europa.eu/regional_policy/innovation/rfec.htm

B3 Regions: Regions for Better Broadband connection: spreading good practices of the expert partners relating to broadband implementation in disadvantaged areas and share experience with Managing Authorities and ICT agencies willing to implement successful broadband strategies with Structural Fund support.

IMMODI: Making the most of good practice in e-Government and e-health, which contribute to the development of mountain and rural areas. Selected examples are presented at technical and regional workshops, detailed in a published guide and discussed with Managing Authorities in order to transfer them into the regional development programmes of participating regions



PIKE: Promoting Innovation and the Knowledge Economy: to improve regional and local Innovation & Knowledge Economy policies through the exchange and transfer of examples of e-Government and Wireless Broadband good practice, and through the integration of these into the development policies of participating regions.

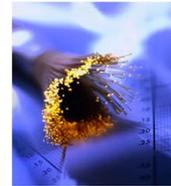
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Digital agenda RegioStars winners

RegioStars 2010: http://ec.europa.eu/regional_policy/innovation/regiostars_en.htm

High Speed Broadband roll out in Auvergne 2006-9 (10 M€ERDF)

- One of the most sparsely populated regions in France, launched the first telecommunications public/private partnership in the country.
- EU funding: EUR 10 million ERDF grant to extend high-speed broadband coverage to all households.
- Goal: extend high-speed broadband coverage to 100% of households. Mission Accomplished: Some 99.6% of lines in Auvergne are now eligible for high-speed broadband through DSL technology, while the other 0.4% have a satellite option.



Computer Literacy Basics for a Lithuanian e-Citizen, 2006-8 (EUR 2,694,534)

- Provides computer literacy training, in line with the objectives established by the national Knowledge Society Council, establish Public Internet Access Points
- Key target groups: people living in remote areas with little access to digital services, in particular in rural regions, the elderly and those with disabilities.
- Private and public partnership with local municipalities made to reach directly persons living in district centres and rural areas.
- Over 50,400 adults have completed the LIA courses - helping to boost the overall competitiveness of Lithuania's economy by upgrading skills.



“Freedom of location increased thanks to ICTs will emphasize the significance of features of place”.
(Talvitie, J. 2003)

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Public Procurement for innovation market pull

East of England pre-commercial procurement for health care innovations

- May 2009: first pre-commercial procurement of an innovative process, material, device, product or service to help meet current health priorities in the region;
- ERDF funded initiative: Up to £100,000 was awarded for winning tenders in a first phase with the potential of further financial assistance to develop and evaluate projects in a second phase.
- The aim is to provide procurement opportunities for innovative health care businesses and bring the benefits of new innovations and technologies to patients.



RAPIDE ERDF Fast Track Network of 12 regions from across the EU

Exploring how the public sector can influence innovation

□ Lead by the Regional Development Agency of South West England (UK), between 2008-2010 selection and adaptation of:

1. Innovation Voucher Schemes
2. Pre-Commercial Procurement projects (PCP)
3. Business Angel Networks
4. Assessment tool for start-ups in incubators
5. Pitching tool (media-based) to bring innovators to investors



« The public sector constitutes an enormous market accounting up to 16% of GDP...public procurement is potentially one of the most powerful levers for effecting behavioural change amongst its private sector suppliers » Kevin Morgan 2010

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What is Smart Specialisation ?

http://ec.europa.eu/research/era/publication_en.cfm

- ❑ 'Knowledge for Growth' expert group (DG RTD) launched concept in the framework of ERA;
- ❑ Problem: fragmentation/imitation/duplication of public R&D investments;
- ❑ Stresses role for all regions (that want to invest) in the knowledge economy, if they can identify comparative advantages in specific R & I domains/clusters (not just winning sectors);
- ❑ Challenges: Smart specialisation has to embrace the concept of open innovation, not only investment in (basic) research.



“Most advanced regions invest in the invention of general purpose technologies, others invest in the co-invention of applications of the generic technology in one or several important domains of the regional economy”

Dominique Foray 2010

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What is Smart Specialisation ?

- = evidence-based: all assets
- = no top-down decision, but dynamic/entrepreneurial discovery process inv. key stakeholders
- = global perspective on potential competitive advantage & potential for cooperation
- = source-in knowledge, & technologies etc. rather than re-inventing the wheel
- = priority setting in times of scarce resources
- = getting better / excel with something specific
- = focus investments on regional comparative advantage
- = accumulation of critical mass
- = not necessarily focus on a single sector, but cross-fertilisations

“... A particular case is made for selecting Innovation as a core priority. Place-based interventions, building on the strengths and taking account of the weaknesses of previous experience as regards cohesion policy in this area, could complement policies aimed at developing a European Research Area, by selecting in each region a limited number of sectors in which innovation can most readily occur and a knowledge base built up. Through such an approach – defined in the current policy debate as “smart specialization” - the most could be made of the present diversity of industrial agglomerations and networks, while their “openness” beyond regional or national boundaries would be promoted...”

(“An agenda for a Reformed Cohesion Policy: A place-based approach to meeting European Union challenges and expectations”, Fabrizio Barca Report (2009))

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Innovation-driven development strategy focusing on regional strength/competitive advantage

- Focus on private R&I investments, SMEs in particular
- Specialising in a smart way, i.e. **based on evidence and strategic intelligence** about a region's assets
- **Looking beyond boundaries**, positioning region in global context
- **International differentiation strategy** to attract investments
- Not necessarily new for regions, but **needs to be reinforced across all regions**

What: Constructing regional advantage and promoting 'related variety' for regional development

- **Supports the integration and exploitation of all sorts of R&I assets**
- Promotes 'related variety' by focusing on cross-sectoral linkages
- Emphasis on interregional connections and the EU dimension

How: Strong focus on bottom-up process and stakeholder involvement and interaction

- Top-down setting of objectives (EU2020, Innovation Union) and **bottom-up processes of entrepreneurial discovery**
- Involving experts, businesses, research centres, universities and other knowledge-creating institutions and stakeholders: builds on triple-helix partnership
- **Sound SWOT analysis, identification of competitiveness factors**, enabling technologies, **concentrating resources on key priorities.**

Is this only for high-tech regions?

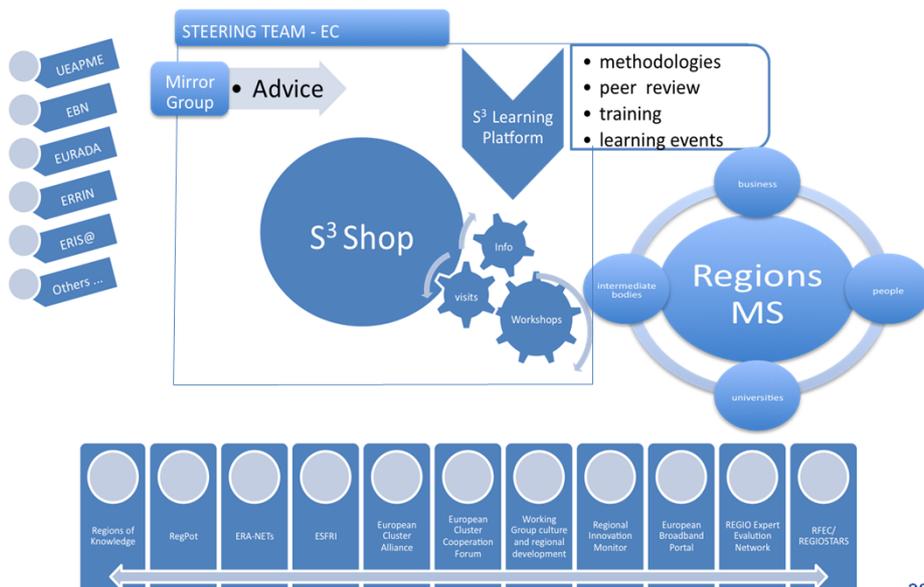
Surely not! It provides a strategy and global role for every regional economy, irrespective of whether they are innovation leaders, followers or catching-up, whether they are mainly driven by agriculture, manufacturing or services.

Outline of the S³ Platform

- The platform will be **established at the Joint Research Centre (IPTS) in Seville**
- It covers a three-year period
- 2011 actions and results achieved will be used to reinforced actions in 2012 and 2013...
- It will act as a facilitator in bringing together the relevant policy support activities in research, regional, enterprise, innovation, information society, education and sustainable policies.
- Will inform and communicate on related funding opportunities under the relevant EU funding programmes.
- It will include the facilities to provide direct feed-back and information to regions, Member States and its intermediate bodies.
- Provides methodological support, expert advice, training, information on good practice, etc.

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Smart Specialisation Platform



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We know what it takes to compete for the jobs and industries of our time. We need to out-innovate, out-educate, and out-build the rest of the world. That's how our people will prosper. That's how we'll win the future.

US President Obama,
State of the Union Address 2011

□ Place-based policies should reflect the comparative advantages and needs of distinct regions across the Nation, both in mature and emergent economic sectors that operate in rural and metropolitan.

□ The elements of economic productivity – strong infrastructure, a skilled workforce, and interrelated networks of firms – come together with smart economic strategy on the regional level to drive prosperity.

(Guidance on developing place-based policies for the FY 2012 Budget)



Telephone surveys of 1000 Senior business executives in 12 MSs (2010)

95%: innovation is the main level for a more competitive national economy

88%: innovation is the best way to create jobs in their country

Individuals have a part to play as much as large companies /

Innovation lives on Partnership not stand alone success /

Investing in Education IS investing in Innovation /

Creativity is as good an Innovation driver as Science /

There is a social role for Innovation /

Innovation needs to be localized to serve specific needs /

When Innovation is perceived as GLOBAL, COLLABORATIVE, CREATIVITY DRIVEN, FUELED BY EDUCATION AND INDIVIDUALS POTENTIAL, IT IS SOCIALLY CONSCIOUS, Business executives are more OPTIMISTIC and Innovation's ability to transform society and general public support to Innovation in reported to be higher.



Will Hutton
The Observer, Sunday 13 February 2011
[Article history](#)

If we want to step up the pace of invention, there has to be a huge shift in the way we think:

Over the past couple of decades the key question – what new goods and services are entrepreneurs going to come up with using transformative technologies – went largely unanswered...

Innovation was left to look after itself. What were seen to matter were lower regulations, lower taxes and reduced worker entitlements – not using the state to build the ecosystem in which innovation, experimentation and investment flourish as had been done through the early part of the 20th century.

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Regio Stars 2012

1. Smart growth (service innovation)
2. Sustainable growth (ecosystem services)
3. Inclusive growth (demographic change and active ageing)
4. Citystar (integrated strategies for deprived urban areas)
5. Information and communication (IT or Web 2.0 tools used for promotion and management of programmes)

Completed application forms submitted by **15 July 2011** to:

regio-stars@ec.europa.eu

Submitted by **Regional Managing Authority**



http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/regiostars_12_en.cfm?nmenu=4

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