



The Experience of Regions of Knowledge and the way forward with HORIZON2020

Luc Janssen

*Policy Officer, Regional Dimension of Innovation
Research and Innovation Directorate
Directorate General for Research and Innovation
European Commission
Lucas.Janssen@ec.europa.eu*

Kick-off Meeting ENSEA, Papenburg, 8/10/12



Regions of knowledge - Policy context

- ***Focus on European regions: need to boost research and technology-based economic development, through better innovation strategies***
 - within the framework of the **Lisbon and Europe 2020 strategies** for a performing knowledge-based economy
 - **With a view of promoting the emergence of world class clusters in Europe**
 - To help reach the **Barcelona objectives (adopted last year also by the US)**
 - Through increased synergies **between Cohesion, Research and Innovation and Cluster** policies



The Legacy of **REGIONS OF KNOWLEDGE**

- ***Built on a pilot action by the EP (2003) and under FP6 (Regions of Knowledge –II)***
- ***Full-fledged initiative under the Capacities Specific Programme (FP7)***
- ***Budget of 126 M€ over 7 years****
- ***Implementation close to the EU2020 Strategy and its flagship initiatives :***
 - **Innovation Union**
 - **A digital agenda for Europe**
 - **Resource efficient Europe**
- ***Programme positioned in triangle of EU regional, research and innovation policies***
- ***Harness successful clusters to promote regional smart specialisation strategies but also make them fit for global competition***



Cluster benefits

Clusters Increase Productivity

- Efficient **access** to specialized inputs, employees, information, institutions, and “public goods” such as training programs and training institutions
- Ease of **coordination** across firms
- Rapid **diffusion** of best practices
- Ongoing, visible **performance comparisons** and strong incentives to improve vs. local rivals

Clusters Stimulate and Enable Innovation

- Better ability to perceive **innovation opportunities**
- Presence of multiple suppliers and institutions to assist in **knowledge creation**
- Ease of **experimentation** given locally available resources

Clusters Facilitate Commercialization

- Opportunities for **new companies** and **new lines of established business** are more apparent
- Lower **barriers to entry** into cluster related businesses because of available skills, supplies, etc
 - Competition is fundamentally enhanced by **externalities / linkages** across firms, industries, and associated institutions

Copyright © 2001 Professor Michael E. Porter; Council on Competitiveness; Monitor Company Group, L.P.; and on the FRONTIER



REGIONS OF KNOWLEDGE

Objective:

- ***Strengthen the research potential of European regions by supporting the development of research-driven clusters associating universities, research centres, enterprises and regional authorities and supporting their cooperation***
- ***Consortia of at least 3 regional research driven clusters from 3 different countries***
- ***Compulsory clustering of research, business and regional government ("triple helix"), Regional Research Agendas and Joint Action Plans are key elements***

REGIONS OF KNOWLEDGE : Key findings of impact assessment study (1)

- **A targeted programme playing a non negligible role in the smart specialisation of regions**
 - **Most projects focus on areas of regional strategic importance: either it is a key area for future regional economic development; or it is a traditional area of specialisation undergoing restructuring**
 - **Development of sectoral's regional innovation strategies through the couple 'state of the art analyses / SRAs + JAPs' in regions which have often already carried out 'generalist' regional innovation strategies.**
- **Outcomes are still to a large extent 'intangible' including:**
 - **Improvement of clusters' strategic management, enhancement of expertise and competence in regional authorities, strengthening of collaboration within and between the clusters**

Source: Technopolis Group



REGIONS OF KNOWLEDGE : Key findings of impact assessment study (2)

- ***The five most potential impacts of the participation to a RoK project according to the survey were:***
 - **An improved strategic vision in the cluster area;**
 - **The formation of new, long-term relationships with clusters at the EU level;**
 - **More knowledge transfer between research organisations and enterprises;**
 - **Access to a pool of complementary competencies;**
 - **Improvement in the strategy making process.**
- ***RoK set the fundamentals for future impacts to occur in terms of an enhanced regional economic competitiveness through R&D activities.***

Source: Technopolis Group



Source: Technopolis Group

REGIONS OF KNOWLEDGE : Key findings of impact assessment study (3)

Balanced partnerships in terms of 'triple helix' and newly established regional linkages

- ***Public bodies, the main partners followed by businesses, universities and research organisations.***
- ***Long-lasting effects esp. in terms of inter-regional collaboration but also strengthening of intra-regional links & communication channels between the triple helix***
- ***Progressive up scaling of the programme over the years to increase the level of cooperation between regional research-driven clusters***
- ***Fundamentals for gaining a critical mass & the potential for international competitiveness***
- ***Mentoring dimension***



What is Horizon 2020

- *Commission proposal for a 80 billion euro research and innovation funding programme (2014-20)*
- *Part of proposals for next EU budget, complementing Structural Funds, education, etc.*
- *A core part of Europe 2020, Innovation Union & European Research Area:*
 - **Responding to the economic crisis to invest in future jobs and growth**
 - **Addressing peoples' concerns about their livelihoods, safety and environment.**
 - **Strengthening the EU's global position in research, innovation and technology**

What's new

- **A single programme *bringing together three separate programmes/initiatives:***
 - ***The 7th research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)***
- **More innovation, *from research to retail, all forms of innovation***
- **Focus on societal challenges *facing EU society, e.g. health, clean energy and transport***
- **Simplified access, *for all companies, universities, institutes in all EU countries and beyond.***

Priority 1 Excellent science

- **Why:**
- *World class science is the foundation of tomorrow's technologies, jobs and wellbeing*
- *Europe needs to develop, attract and retain research talent*
- *Researchers need access to the best infrastructures*

European Research Council <i>Frontier research by the best individual teams</i>	13 268
Future and Emerging Technologies <i>Collaborative research to open new fields of innovation</i>	3 100
Marie Curie actions* <i>Opportunities for training and career development</i>	5 752
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2 478

Priority 2 Industrial leadership

- *Europe needs more innovative SMEs to create growth and jobs*
- **Why:**
- *Strategic investments in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors*
- *Europe needs to attract more private investment in research and innovation*

Leadership in enabling and industrial technologies (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 781
Access to risk finance <i>Leveraging private finance and venture capital for research and innovation</i>	3 538
Innovation in SMEs <i>Fostering all forms of innovation in all types of SMEs</i>	619

Priority 3 Societal challenges

- **Why:**
- *EU policy objectives (climate, environment, energy, transport etc) cannot be achieved without innovation*
- *Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities*
- *Promising solutions need to be tested, demonstrated and scaled up*

Health, demographic change and wellbeing	8 033
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4 152
Secure, clean and efficient energy*	5 782
Smart, green and integrated transport	6 802
Climate action, resource efficiency and raw materials	3 160
Inclusive, innovative and secure societies	3 819

***Additional €1 050m for nuclear safety and security from the Euratom Treaty activities (2014-18). Does not include ITER.**

Rules for Participation: *what's new? (1)*

1. A SINGLE SET OF RULES

- *Adapted for the whole research and innovation cycle*
- *Covering all research programmes and funding bodies*
- *Aligned to the Financial Regulation, coherent with other new EU Programmes.*

2. ONE PROJECT - ONE FUNDING RATE.

- *Maximum of 100% of direct costs (except for actions close to market, where a 70% maximum will apply)*
- *Indirect eligible costs: a flat rate of 20% of direct eligible costs*

3. SIMPLE EVALUATION CRITERIA

- *Excellence – Impact - Implementation (Excellence only, for the ERC)*

4 *NEW FORMS OF FUNDING aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments.*

5. *INTERNATIONAL PARTICIPATION: facilitated but better protecting EU interests.*

Rules for Participation: *what's new? (2)*

6. SIMPLER RULES FOR GRANTS: broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants

7. FEWER, BETTER TARGETED CONTROLS AND AUDITS

- *Lowest possible level of requirements for submission of audit certificates without undermining sound financial management;*
- *Audit strategy focused on risk and fraud prevention.*

8. IMPROVED RULES ON INTELLECTUAL PROPERTY

- *Balance between legal security and flexibility;*
- *Tailor-made IPR provisions for new forms of funding;*
- *A new emphasis on open access to research publications.*

Beyond the Rules: further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (eg. common IT platform).

Broader access

- *For **SMEs** - dedicated SME projects to address societal challenges and enabling technologies*
- *For all **regions** – tailored support to policy learning, twinning, networking, complementing Structural Funds*
- *For **international partners** – broad access to Horizon 2020 (“mainstreaming”), strategic initiatives where there is mutual benefit*
- *For **all forms of innovation** - social innovation, services, pilots, stimulating demand through public procurement, standard setting*



R&D excellence & Cohesion Policy: two policies with complementary objectives

EU R&D Policy – future Horizon 2020	EU Cohesion Policy
Differences	
Based on individual R&D Projects often of a pre-competitive nature aiming at improving leading edge basic research	Based on multiannual Programmes aiming at increased economic competitiveness 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)	Awarded through shared management to national and regional public intermediaries
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
Complementarities	
Horizon 2020 will focus on tackling major societal challenge, maximising the competitiveness impact of research and innovation 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.



Thank you !



Lucas.Janssen@ec.europa.eu

Research and
Innovation