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

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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**
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

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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**
• 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 restructuration
  ➢ 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
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 fundaments for future impacts to occur in terms of an enhanced regional economic competitiveness through R&D activities.

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
- Fundaments 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

<table>
<thead>
<tr>
<th>European Research Council</th>
<th>13 268</th>
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<tbody>
<tr>
<td>Frontier research by the best individual teams</td>
<td></td>
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<tr>
<td>Future and Emerging Technologies</td>
<td>3 100</td>
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<tr>
<td>Collaborative research to open new fields of innovation</td>
<td></td>
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<tr>
<td>Marie Curie actions*</td>
<td>5 752</td>
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<tr>
<td>Opportunities for training and career development</td>
<td></td>
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<tr>
<td>Research infrastructures (including e-infrastructure)</td>
<td>2 478</td>
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<tr>
<td>Ensuring access to world-class facilities</td>
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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
  - Leveraging private finance and venture capital for research and innovation | 3 538 |
| Innovation in SMEs
  - Fostering all forms of innovation in all types of SMEs | 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

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<tr>
<th>Area</th>
<th>Funding (m)</th>
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<tbody>
<tr>
<td>Health, demographic change and wellbeing</td>
<td>8,033</td>
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<tr>
<td>Food security, sustainable agriculture, marine and maritime research &amp; the bioeconomy</td>
<td>4,152</td>
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<tr>
<td>Secure, clean and efficient energy*</td>
<td>5,782</td>
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<tr>
<td>Smart, green and integrated transport</td>
<td>6,802</td>
</tr>
<tr>
<td>Climate action, resource efficiency and raw materials</td>
<td>3,160</td>
</tr>
<tr>
<td>Inclusive, innovative and secure societies</td>
<td>3,819</td>
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*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.
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

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<th>EU R&amp;D Policy – future Horizon 2020</th>
<th>EU Cohesion Policy</th>
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<td><strong>Differences</strong></td>
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<td>Based on <strong>individual R&amp;D Projects</strong> often of a pre-competitive nature aiming at improving leading edge <strong>basic research</strong></td>
<td>Based on <strong>multiannual Programmes</strong> aiming at increased economic competitiveness through close to the market competitive R&amp;D and <strong>innovation</strong> efforts</td>
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<td>Awarded <strong>directly to final beneficiaries</strong> (firms, public and private R&amp;D centres and Universities)</td>
<td>Awarded <strong>through</strong> shared management to national and regional <strong>public intermediaries</strong></td>
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<td><strong>Competitive calls</strong> addressed to international groupings through peer review <strong>based on excellence criteria</strong></td>
<td><strong>Non competitive attribution</strong> addressed to regional players <strong>based on strategic planning</strong> negotiation</td>
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<td><strong>Complementarities</strong></td>
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<td><strong>Horizon 2020</strong> will focus on tackling major societal challenge, maximising the competitiveness impact of research and innovation and raising and spreading levels of <strong>excellence</strong> in the research base</td>
<td>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.</td>
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Thank you!

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