Οι Ευρωπαϊκές πολιτικές για την περιφερειακή διάσταση της έρευνας και καινοτομίας

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Based on a presentation by Dimitri Corpakis, DG R&I
The knowledge economy is here at a price

- Division of labour on global scale, increased internationalisation and global capital flows, coupled with the disparities of the knowledge economy may drive regions to technological obsolescence (failing clusters)

- Regions need to reposition themselves at global level

- Crucial roles of Clusters and Competence Centres as repositioning factors at regional level

- towards Smart Specialisation Strategies
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)

![Graph showing the relationship between index of innovative output and index of economic output.](image)

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)
Some telling facts about Europe

- In 2008, almost 11% of the total EU budget was devoted to research and innovation, compared to less than 3% in 1985.
- In most EU-12 Member States, Structural Funds directed to Research, Technological Development and Innovation represent more than 60% of the national R&D budget, and even 100% in a few cases.
- EU Research Framework Programme represents some 20% to 25% of all project-based funding in Europe.
- Knowledge flows inside Europe (i.e. flows of students, electronic academic links, co-publications and co-patenting cooperation) very unbalanced
  - strong concentration amongst a few European countries

*Source: Innovation Union Scoreboard 2011*
The Heat-map of scientific collaboration in Europe 2005-2009
The EU is slowly falling behind on R&D

Evolution of world R&D expenditure in real terms
(in € billion at 2000 prices)

Source: European Commission
What’s wrong in Europe?

- Poor availability of finance
- Costly patenting
- Lack of legal and tax level-playing field
- Outdated regulations and procedures
- Slow standard-setting
- Weaknesses in public education and innovation systems
- Failure to use public procurement strategically
- Fragmentation of efforts

Presentation of J.M. Barroso to the European Council, 4 February 2011
What can we do about it?

- ‘Smart’ fiscal consolidation
- Improved framework conditions
- Steer and monitor at EU level
- A future-oriented EU budget
Europe 2020 strategy

• 3 Clear objectives
  – Smart, sustainable and inclusive growth

Invest 3% of GDP in R&D by 2020

• Focus on Innovation
  – Research and innovation funding contributes directly to the achievement of Europe 2020 (Innovation Union flagship initiative)

• Focus on ICT
  – ICT is key enabling factor (Digital Agenda flagship)
• The Budget Review (19 Oct 2010)
  – announced the development of a Common Strategic Framework (CSF) for EU level research and innovation funding (FP, CIP & EIT). This will link to a distinct CSF covering Cohesion policy.
  – sent a clear message that greater thematic focus and conditionality are essential in the next round of Structural Funds, including in the domain of R&I.

• The need for greater thematic focus and conditionality were carried into the 5th Cohesion Report and the work undertaken for the next programming period.
R&D excellence & Regional Innovation: two policies with complementary objectives

An R&D excellence-based approach: more money for basic leading edge R&D - help the best compete globally...the others will follow

30% of business expenditure on R&D and nearly half of all high-tech patent applications in just 15 regions (over 271 in all the EU). Over 6,000 SMEs involved in the VII FWP in first two years (12.3% of funding)

The "regional systems approach": more investment in innovation – deploy relevant infrastructure, tap underutilised potential, SMEs in particular, wherever it exists, diffuse and adapt knowledge and technology...
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’-14’

- Smart and Inclusive Growth - 47.89%
  - Economic, Social and Territorial Cohesion - 36.68%
    - Cohesion policy - 32.78%
    - Connecting Europe Facility - 3.90%
  - CSF research and innovation - 7.80%
  - Others - 3.40%
- Sustainable Growth: Natural Resources - 37.36%
  - CAP (direct payments + market expenditure) - 27.50%
  - Rural development - 8.77%
  - Others - 1.09%
- Security and citizenship - 1.81%
- Global Europe - 6.83%
- Administration - 6.11%
Horizon 2020 – Objectives and structure

**Tackling Societal Challenges**
- Health, demographic change and well-being
- Food security and the bio-based economy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Supply of raw materials
- Resource efficiency and climate action
- Inclusive, innovative and secure societies

**Creating Industrial Leadership and Competitive Frameworks**
- Leadership in enabling and industrial technologies
  - ICT
  - Nanotech., Materials, Manuf. and Processing
  - Biotechnology
  - Space
- Access to risk finance
- Innovation in SMEs

**Excellence in the Science Base**
- Frontier research (ERC)
- Future and Emerging Technologies (FET)
- Skills and career development (Marie Curie)
- Research infrastructures

**Shared objectives and principles**

**Europe 2020 priorities**

**Common rules, toolkit of funding schemes**

**Dissemination & knowledge transfer**

**International cooperation**

**European Research Area**

**Simplified access**
How to ensure complementarity between Research and Innovation policy and Cohesion Policy

• Two sides of the same coin: both important for Regional Competitiveness

• Need for fine tuning of national and regional Research investment priorities at short, medium and long term in the future SF / Development and Investment Partnership Contracts / Operational Programmes (with MS and Regions)

• Guiding principles: the EU strategic research priorities in the future H2020, the developing ERA process, the recent Strategic Commission Communications (notably Innovation Union and Digital Agenda – will be used by S3 Platform)

➢ main responsibility lies with the national /regional authorities
How the Structural Funds can stimulate R&D and Innovation investment in European regions

- Fund R&D infrastructure and equipment (conventional approach—still valid)
- favouring the establishment of medium and long term R&D and innovation investment strategies through Smart Specialisation (coupled with increased conditionality and clear thematic priorities)
- help create the appropriate framework conditions for stimulating R&D and innovation especially in connecting academia and industry
- stimulate the emergence of clusters of technological competence / excellence involving especially SMEs
- Favouring peer review through international expertise to raise quality in terms of strategy and delivery
What national and regional authorities can do right now!

• **Raise awareness** of all actors involved in planning at national and regional level about the **importance** of research and innovation investment strategies

• **Raise awareness** of local R&D and Innovation communities in business and academia about the **investment opportunities in the future CSF RI and the Structural Funds**

• **Align to the maximum extent possible** future Development and Investment Partnership Contracts research and innovation priorities to *EU Research and Innovation strategic ones* (in line as much as possible with National Reform programmes)
Thanks for your attention!

Original work by Dimitri Corpakis, EC – RTD

*Credits* to Mikel Landabaso and colleagues, EC - REGIO
A closer look on European regions...
Regional innovation typologies

Wintjes/Hollanders (2010)

(T1) High-tech regions
(T2) Skilled technology regions
(T3) Skilled industrial Eastern EU regions
(T4) Metropolitan knowledge intensive service regions
(T5) Public knowledge centres
(T6) Traditional Southern regions
(T7) Knowledge absorbing regions

Navarro /Gibaja (2009)

(G1) Peripheral agricultural regions with a strong economic and technological lag
(G2) Restructuring industrial regions with strong weaknesses
(G3) Peripheral regions with an economic and technological lag
(G4) Central regions with an intermediate economic and technological capacity
(G5) Industrially restructured regions with a certain economic and technological capacity
(G6) Service oriented regions with a certain economic and technological capacity
(G7) Technologically advanced regions with an industrial specialisation
(G8) Service oriented Innovative and capital regions

Source: DG-Research
Calculations: Technopolis Group based on Wintjes and Hollanders (2010) and Navarro and Gibaja (2009)
# Productivity

<table>
<thead>
<tr>
<th>Region Description</th>
<th>GDP per person employed (EUR), 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>UKI1 Inner London</td>
<td>323</td>
</tr>
<tr>
<td>UKM5 North Eastern Scotland</td>
<td>215</td>
</tr>
<tr>
<td>LU00 Luxemburg (Grand-Duché)</td>
<td>206</td>
</tr>
<tr>
<td>NL11 Groningen</td>
<td>204</td>
</tr>
<tr>
<td>FR10 Île de France</td>
<td>182</td>
</tr>
<tr>
<td>BE10 Région de Bruxelles-Capitale / Brussels Hoofdstedeli</td>
<td>173</td>
</tr>
<tr>
<td>IE02 Southern and Eastern</td>
<td>168</td>
</tr>
<tr>
<td>SE11 Stockholm</td>
<td>160</td>
</tr>
<tr>
<td>DK01 Hovedstaden</td>
<td>156</td>
</tr>
<tr>
<td>BE21 Prov. Antwerpen</td>
<td>153</td>
</tr>
<tr>
<td>RO22 Sud-Est</td>
<td>24</td>
</tr>
<tr>
<td>BG41 Yugozapaden</td>
<td>23</td>
</tr>
<tr>
<td>RO31 Sud - Muntenia</td>
<td>22</td>
</tr>
<tr>
<td>RO41 Sud-Vest Oltenia</td>
<td>20</td>
</tr>
<tr>
<td>RO21 Nord-Est</td>
<td>16</td>
</tr>
<tr>
<td>BG33 Severoiztochen</td>
<td>16</td>
</tr>
<tr>
<td>BG34 Yugoiztochen</td>
<td>14</td>
</tr>
<tr>
<td>BG31 Severozapaden</td>
<td>13</td>
</tr>
<tr>
<td>BG32 Severen tsentralen</td>
<td>12</td>
</tr>
<tr>
<td>BG42 Yuzhen tsentralen</td>
<td>12</td>
</tr>
</tbody>
</table>
Competitiveness Index, 2010

Index - Values range between 0 (low) and 100 (high)

- NL31 Utrecht 100.0
- DK01 Hovedstaden 95.9
- NL32 Noord-Holland 95.4
- UKI London 94.3
- SE11 Stockholm 94.3
- FI18 Etelä-Suomi 92.6
- NL33 Zuid-Holland 92.4
- FR10 Île de France 92.1
- NL41 Noord-Brabant 91.4
- UKJ1 Berkshire, Buckinghamshire and Oxfordshire 90.1
- ES21 País Vasco 61.8
- RO41 Sud-Vest Oltenia 12.7
- GR42 Notio Aigaio 12.5
- RO22 Sud-Est 12.2
- BG31 Severozapaden 12.1
- GR22 Ionia Nisia 9.5
- ES63 Ciudad Autónoma de Ceuta 8.9
- PT20 Região Autónoma dos Açores 8.8
- GR41 Voreio Aigaio 8.0
- ES64 Ciudad Autónoma de Melilla 5.1
- FR93 Guyane 0.0
Regional Innovation Performance taxonomy

Source: Regional Innovation Scoreboard, 2009
• GERD, 2007 (Source DG REGIO, EUROSTAT)
Specific messages to European regions
A word on synergies between CSF for R/I and Cohesion policy
Strategic Report 2009 / core RTDI (1):
Amounts adopted in OPs and rate of implementation (%)

Graphs ordered from left to right by declining absolute value
Codes 1, 2, 3, 4, 6, 7, 9: € 44.8 billion available under Cohesion Policy (CP)
Average project selection for core RTDI: 29.8% (all CP codes: 27.1%)
Slow progress (< 20 %) : CZ, HU, GR, SK
Strategic Report 2009 / core RTDI (2):
Amounts adopted in OPs and rate of implementation (%)

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### The MFF 2014-20 as announced – Cohesion Policy

**All figures in constant 2011 prices**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total proposed budget 2014-2020</td>
<td>€376 bn</td>
<td></td>
</tr>
<tr>
<td><strong>Of which</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Convergence regions</td>
<td>€162.6 bn</td>
<td>43.24%</td>
</tr>
<tr>
<td>• Transition regions</td>
<td>€39 bn</td>
<td>10.37%</td>
</tr>
<tr>
<td>• Competitiveness regions</td>
<td>€53.1 bn</td>
<td>14.12%</td>
</tr>
<tr>
<td>• Territorial cooperation</td>
<td>€11.7 bn</td>
<td>3.11%</td>
</tr>
<tr>
<td>• Cohesion fund</td>
<td>€68.7 bn</td>
<td>18.27%</td>
</tr>
<tr>
<td>• Extra allocation for outermost and sparsely populated regions</td>
<td>€926 million</td>
<td>0.24%</td>
</tr>
<tr>
<td>• Connecting Europe Facility for transport, energy and ICT</td>
<td>€40 bn plus €10 bn ring fenced inside the Cohesion Fund</td>
<td>10.63%</td>
</tr>
</tbody>
</table>
The MMF as announced CSF RI


Figures in constant 2011 prices

| Common Strategic Framework for Research and Innovation | €80 bn |

It was proposed to increase the expenditure ceilings for Horizon 2020, the CSF RI to some EUR 80,2 billion in 2011 prices. This represents an increase of around 46% compared to the current programming period and almost 66% compared in current prices.