European Research Area: New Perspectives.
Remarks from CRASP/EUA

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THE EUROPE OF KNOWLEDGE

European Higher Education Area (EHEA):

(Bologna Process) – compatible systems of higher education at national levels (82 % of universities have the three cycles)…DONE.

Focus : Doctoral studies !!!!!!

European Research Area (ERA):

…similar actions….??

Urgent need for a greater linkage and dialogue in the policy development between EHEA and ERA

ERA
WHAT HAS BEEN ACHIEVED

- 3% of GDP objective for R&D (Barcelona 2002)
  declaration !!!
- Introduction of the open method of coordination (work and mobility of researchers, knowledge transfer, tax incentives for R&D)
- Increased resources and new instruments of FP7
  (>50 billion Euro)
- New institutions (agencies): ERC, EIT: different missions, „basic", „applied" research ?
- A role of universities in shaping the ERA ???

STRONG UNIVERSITIES FOR STRONG EUROPE (EUA)

- Main responsabilities for providing the supply of trained researchers,
- Fundamental and collaborative research as their core mission,
- Unique enivironment in which interdisciplinary skills are being developed to tackle the complex challenges,
- European tradition in social and human sciences offers new interdisciplinary fields as competitive advantage in the global economy

RELAUNCHING ERA
Green Paper, 2007

- **From six main dimensions of the ERA:**

- *adequate flow of competenet researchers,*
- *world-class research infrastructures,*
- *excellent research insitutions,*
- *effective knowledge-sharing,*
- *coordinated research programmes and priorities,*
- *wide opening of ERA to the world.*

RELAUNCHING ERA

- ***To five iniciatives (2008):***
- **European Researcher's passport** (*improve mobility and career prospects*) ,
- **Joint Programming** (*more strategic and structured approach to joint research programme*),
- **Pan-European Research Infrastructures** (*facilitate formation of consortia*…),
- **Policy Framework for International Science and Technology cooperation** (*improve coordination*…),
- **Code of Practice on IP management by puiblic research organizations**.

European Researcher's passport

Mobility….a battle for brains.

- Career prospects; ERA needs to be connected more with reform under Bologna process, particularly with 3-rd Cycle (doctoral programmes for academic and non-academic careers)
- Europe needs urgently a policy dialogue between European institutions and national governments, research councils, private foundations and bussiness for more and diverse funding of doctoral research across Europe.
- A dialogue is needed between universities and public research institutions and industry/bussiness to „change the mindset" (on both sides) concerning employability and intersectorial mobility
- A need for re-introduction of post-doctoral fellowship (with Marie-Curie Action) scheme.

Joint Programming; ERA-NET approach

- Valuable linking of national and regional research programmes – jointly funded international programmes („applied" research ?).
- A range of competing research funding schemes at regional, national and European level instead of over-coordinated system in terms of funding and priority setting.
- Needed transparency in funding instruments involving industry/governments/universities: Joint Technology Initiatives and EIT.
- CREST (*too few representatives from universities*) have been assigned to the task of establishing a „High Level Group for Joint Programming".

Joint Programming; ERA-NET approach

- Challenges identified (Competitive Council, Dec.2008): food crisis and consequences for ecosystems, climate change and renewable energies, the transition to a knowledge based society, ageing of European population. *Implementation gradually from 2010*.
- The first Joint Programme: ***European Energy Research Alliance***:

  a lesson for universities !!

  - participation of KRASP via EUA,

  - to ensure the openess of the EERA,

  - a „secondary level" of consultation with universities that includes interdyscyplinary approach,

  - EUA – KRASP cannot, at this stage, identify priority research themes, rather to present sound suggestions how to achive beneficial linkage between universities and national research institutions.

Research Infrastructures

- Challenge must be met of **achiving the maximum available use** of research infrastructure for education and training puropses,
- Debate on developing new large-scale infrastructures and their upgrading **is not sufficiently linked to** ..research career development and sustainability of **university-based research and infrastructure.**
- Too much focus on physical research infrastructurte, much less **emphasis on necessary human resource needs**, implications of digital technology for futureuse of the infrastructures.
- Collective capacities and **needs (!) of universities research infrastructures** (including digital repositories) should be **assesed within strategy for research infrastructures.**
- For the „new" member states crucial importance for research infrastructure renewal and upgrading depends on **policy linkage between FP7 and EU Structural Funds.**
- A „reasonable" **geographical distribution of sites** for large scale machines/equipement.

Policy Framework for International Science and Technology cooperation

- EU instruments should be used to facilitate common approaches for international cooperation between European universities and those in industralized or developing countries (joint doctoral programmes, new Erasmus Mundus..),
- Identify common priorities for joint activities *vis-a-vis* third countries and international organizations,
- Too much competences given to *CREST* (predominantly research/bussiness organizations), to establish „Strategic Forum…"
- A need to establish …Polish Agency for Academic Exchange !!!!!!!

From ERA debate to… requirements and actions

- ERA requires urgently increased budget commitment from Member States,
- Greater (real) university autonomy and accountability rather than over-regulation of universities by national and European governmental agencies,
- Full cost funding research (!!),
- Sharing knowledge:

  - *open access,*

  - *responsible partnering*
- Increased involvement of university leaders in EU/national science advisory bodies.
- More coherent linkage between ERA and EHEA involving universities

Message to Political Leaders

in the time of recession.

EUA Prague Declaration, 2009

- Higher education and research needs a European stimulus package – *to continue dynamic development of EHEA and ERA,*
- Investing in the present generation of young researchers – *not to sarfice a generation of young researchers*,
- Upgrading universities' facilities and campus infrastructure - *..also to stimulate economy*,
- Tapping unused potential: implementation and financing of lifelong learning across Europe.

„ Investing more in education and research will help Europe emerge from recession faster and in better shape..”

J.M. Barroso, EUA Convention, Prague 2009.

THANK YOU

OECD Reviews of Tertiary Education- Poland, September 2007

„Both teching and research have been squeezed to the point of serious damage to the aspiration that Polish tertiary education and science should play a full part in the European higher education and research areas”

FDI Confidence Index
Case Study: Poland

Poland jumped from 12th to 5th place in the Index – its highest ranking since 2000 – driven by increased interest from U.S. and European investors.

U.S. Investors rank Poland their 7th most attractive FDI location (up from 12th a year ago), while European investors rank Poland 3rd, up from 6th in 2004.

About one in four global investors is more optimistic about the Polish market – only India, China and Brazil achieved higher levels of investor enthusiasm worldwide.
One in 10 global investors indicated they will make their first-time investments in Poland.

European rank Poland their 4th most attractive R&D investment destination globally. German-based Siemens expanded its Wroclaw research and development center and increased staff by 40 percent. !!!!!!!!!!!!!!!!!

Source: A.T.Kearney FDI Confidence Index, Global business Policy Council, 2005

„The best" use of structural funds: case of Wrocław (Lower Silesia)

- 2,9 mln population
- 19,500 km^2

- economy
- R&D
- education
- culture
- administration
- business

Wrocław: Research and Higher Education

- 11 universities (academic schools) + …
- 2 PAS institutes + Research Centers
- 150 000 students
- 7 200 academic staff
- 1 150 professors
- Wroclaw University of Technology
  (Leading among Polish technical universities; 32 000 undergraduate students, 1300 Ph.D. students; 5500 MSc/year; 250 Ph.D. degrees/year)

Universities for Regional Development

- Polish Manufacturing Technology Platform
- Lower Silesian Centre of Advanced Technologies (DCZT)
- Lower Silesian Centre of Regional Studies (DCSR)
- Innovation and Business Park
- Wrocław Centre for Technology Transfer
- Wrocław Industry/Technology Park
- Wrocław Centre for Networking and Supercomputers
- Centre for Advanced Materials and Nanotechnology

Regional Strategy for Lower Silesia
2007 - 2013

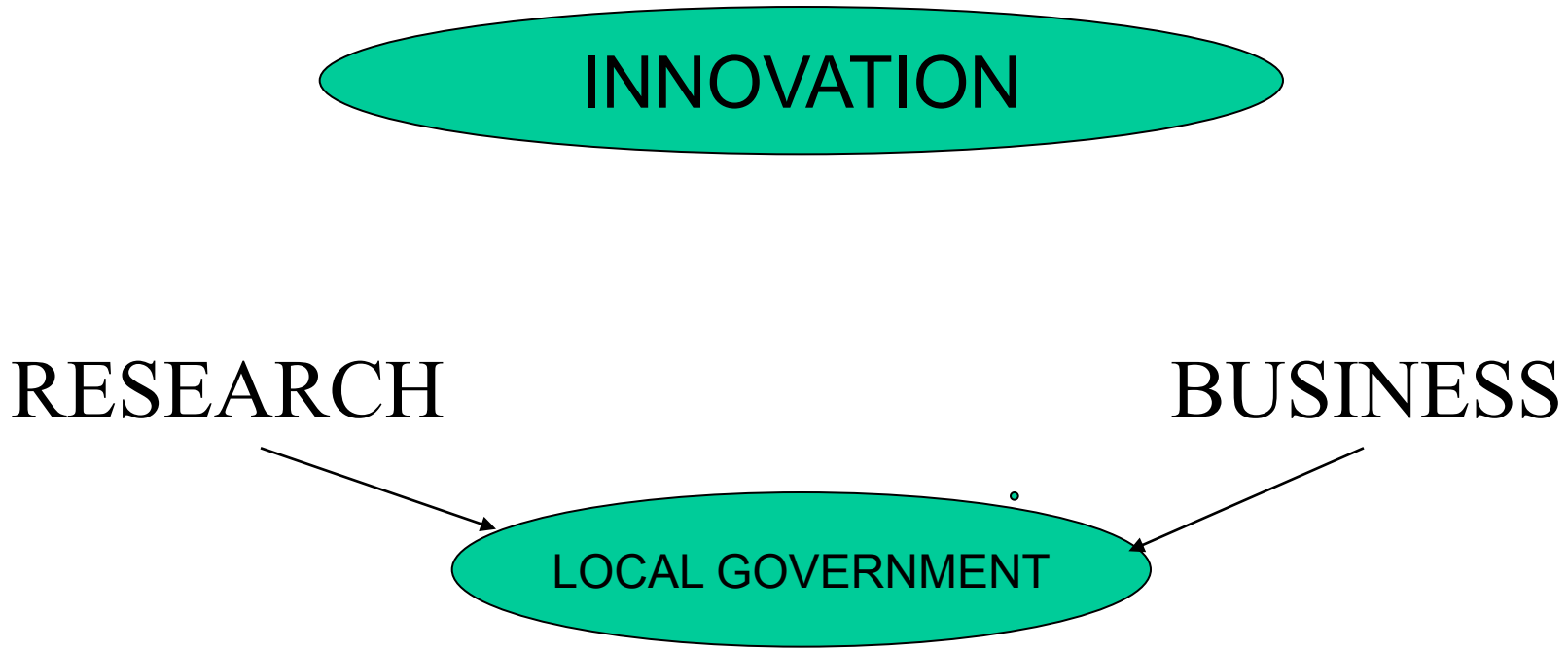
Investing substantial portion of the EU-based structural and cohesion funds into:

- Making Lower Silesia the European Knowledge Creation Region in the European Research Area (ERA)
- Making better conditions for strong partnership between Higher Education, Research and Innovative Business & Economy
- Making Lower Silesia a knowledge-based economy region

The ***EIT – plus*** project

Research – Business Partnering…
LOCAL GOVERNMENT AS A CATALYST

EDUCATION



EIT+ Project

Key research&technology projects:

- ***Biotechnology and advanced medical technologies (27,6 M€)***
- ***Nanotechnologies and advanced materials (30,1 M€)***

Infrastructure for S&T development:

- ***Wrocław Research Centre EIT+ (140 M€)***
- ***Library for Innovative Economy (25 M€)***

Wrocław Research Centre EIT+

- Ltd Company: Four universities, City of Wroclaw, Marshal of Lower Silesia
- Wrocław contribution to the European Institute of Technology (EIT) initiative
- Goal: to integrate the research, education and innovation communities
- Regional research&development entity
- Commercial venture: commercialising of knowledge
- Strong links to Lower Silesian economy
- Disciplines and areas of interest:
  - **NanoMat**: advanced materials, nanotechnology
  - **BioMed**: biochemistry, biophysics, biotechnology

  Basic Research !!!!!!!!!!!!!!

Wrocław Research Centre EIT+

Key industrial partners

Advanced Materials

- AMD Saxony – partnership with WUT
- KGHM/Cuprum – partnership with WUT/EIT+
- PCC Rokita – partnership with WUT
- Ciech Organika – partnership with WUT
- PKN Orlen – partnership with EIT+
- LG Philips
- 3M
- Whirpool
- Wrozamet
- Lower Silesian Mineral/Ore Cluster

Basic Research ???

…share the risk within government supported projects

Biomaterials

- Hasco-lek – spin-off
- Novasome
- Finepharm
- Herbapol
- Lower Silesian Cluster NUTRIBIOMED

Wrocław EIT+ Innovation Cluster

Knowledge Based Economy in Lower Silesia

Innovative business

Spin-offs

Financial institutions

Consulting companies

Wroclaw Research Centre (EIT+)

Legal service

Technology parks and incubators

IP and patent service

Universities
Centres of Excellence
Other university centres (GEO)
Research institutes

Lower Silesian Centre for Regional Studies