Development of the Knowledge Society through Research, Education and Information Technologies

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The Strategy provides a sustainable framework for policy integration and coherent development of the Danube Region. It sets out priority actions to make it an EU region for the 21st century. It must be accompanied by sufficient information and publicity to ensure its objectives are widely known.
EU MACRO–REGIONAL STRATEGY
FOR THE DANUBE REGION

• EUSDR is not a project, but a concept!
EUROPE 2020 STRATEGY

- Smart, sustainable, and inclusive growth

- Research and innovation are at the heart of the Europe 2020 strategy.

- Higher education and research institutions have a key role in providing teaching, undertaking research and innovation, producing employable graduates and developing new ideas for a changing world.
HORIZON 2020

- Grand challenges of the entire region:
  - Food
  - Energy
  - Water
  - Climate change
  - Healthy and active aging
  - Innovation
• Building a European Knowledge Based Economy by bringing together science, industry and other stakeholders, to exploit new and emerging research opportunities that address social, environmental and economic challenges.
PILAR C EUSDR

The structure of the Action Plan

A
Mobility and multimodality
Sustainable energy
Culture and tourism, People to People

B
THE FOUR PILLARS
Water quality
Environmental risks
Biodiversity, landscapes, air and soil quality
Knowledge society
Competitiveness
People and skills
Institutional capacity and cooperation

C

D
Security

11 priority areas, coordinated by a priority area coordinator
• **Education & skills**
  Investment in people is needed so that the Region can sustainably progress and grow, prioritising knowledge and inclusion. Building on the success of parts of the Region will open access to further education, and modernise training and social support.

• **Research & Innovation**
  Targeted support for research infrastructure will stimulate excellence and deepen networking between knowledge providers, companies and policy-makers. The region must use national and regional funds better, and benefit fully from the European Research Area. Existing bilateral agreements should lead to multilateral coordination. Developing regions downstream can benefit from the leading - indeed world-class - innovative regions upstream.
Enterprises
Top-performing regions in Europe can be found in the area. Others lag a long way behind. They need to benefit, through better connections between innovation and business supporting institutions. Clusters and links between centres of excellence, binding them into existing education and research networks, will extend the competitiveness of upstream enterprises to the whole region.

Employment market
Higher levels of employment are crucial. People need opportunities close to where they live. They also need mobility. The Region needs to offer a future to the brightest and most enterprising, through stronger cooperation regarding policies, measures and information exchange.
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- Cooperation
- Competition
THERE IS AN EVIDENT NEED…

√ FOR MORE INTENSIVE COOPERATION OF THE PRIORITY AREAS, in order to be able to share coordination of the researches conducted in all the priority areas.

√ TO BE BETTER CONNECTED TO:
  • other PACs,
  • European Commission Directorates,
  • Regional Directorates,
  • Directorates For Education, Science and ICT,
  • DG Regio.
TARGETS FOR THE PRIORITY AREA 7

- European Commission has identified the following targets:
  - To **invest 3% of GDP in Research and Development** by 2020;
  - **Broadband access** for all EU citizens in the Region by 2013;
  - **Increase the number of patents** obtained in the Region by 50%;
  - **Increase the share of the EU population aged 30–34 with tertiary or equivalent education** to 40% by 2020.
TARGETS FOR THE PRIORITY
AREA 7

• What else..... ? Who else.....?
• networking,
• mobility,
• excellence,
• .......

• What are the current values of the numerical targets in different countries?
UNIVERSITIES IN THE EUSDR INITIATIVE

• Higher education and research are facing with three major issues:
  
  – The challenges of demography;
  – Global competitiveness and cooperation;
  – Redefinition of the roles and responsibilities of the various actors in a system defining higher education and research as public good.
POLICIES AND MECHANISMS TO BE PROMOTED

- Diffusion mechanisms and targeted support for research infrastructure
- Networking of centers of excellence and complementary partnerships
- Smart specialization of and within the region
- Brain–circulation
ICT CHALLENGES

• Digital divide
• living-lab concept
ICT FOR SOCIAL CHALLENGES

• The Digital Agenda focuses on ICTs capability to:
  
  – Reduce energy consumption
  – Support ageing citizens' lives
  – Revolutionize health services
  – Deliver better public services

• ICTs can also drive forward the digitalization of Europe's cultural heritage providing online access for all.
• In order to promote policies mentioned we shall strive:

  – “To establish a Danube Region Research and Innovation Fund promoting excellence in research in the Danube Region”

  – “To strengthen university cooperation through a Danube Region Education, Research and Innovation Platform”

  – “To promote innovation and business' success in new markets”
THE MAIN ACTIVITIES ARE:

• to provide information on the absorption capacities of regional networks, i.e. existing clusters and networks and potentials to create new clusters
• to provide input on possible thematic areas for the DRRIF (based on analysis of existing clusters and involving all Priority Areas
• to explore synergies with existing schemes such as the pilot actions in SEE-ERA.NET (PLUS), etc. and to exchange information with similar actions in other macro-regions (e.g. BONUS in the Baltic Sea region)
• to explore willingness of public funding agencies and ministries as well as private stakeholders (e.g. from the banking sector, selected multinational firms) to channel financial support through the DRRIF including visits to national governments in the region to enhance the political support
• to prepare the organizational framework for DRRIF, to draft process management, technical management, system for call management, evaluation and monitoring of projects
To work towards the establishment of a Danube Region Research and Innovation Fund and potentially to work towards an ERA-NET (PLUS) for the Danube Region.

- In Activity 3, liaison with existing initiatives will be in the focus. The work of establishing **DRRIF** will be strongly based on the experiences of SEE-ERA.NET (PLUS) and will also draw upon lessons learnt from BONUS programme in the Baltic Sea.
BONUS

- **BONUS 2003–2008** (FP6)
  “BONUS for the Baltic Sea Science – Network of Funding Agencies”

- **BONUS+2009–2011**
  “European Economic Interest Grouping EEIG”

- **BONUS 2010–2016**
The goal of BONUS ERA–NET was to establish a network and partnership of key agencies funding research, with the aim to deepen the understanding of conditions for science-based management of environmental issues in the Baltic Sea. To achieve this, BONUS ERA–NET operated in close connection with the scientific and management actors.
BONUS+2009–2011

BONUS EEIG, representing altogether 10 research funding organisations from all nine Baltic Sea states (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russian Federation and Sweden), opened a call for multilateral research projects within the framework of the BONUS–169 Science Plan.
In June 2010, the European Parliament supported the European Council’s decision that launched a new research and development programme to protect the Baltic Sea, BONUS, worth of EUR 100 million for the years 2010–2016. In particular, the exceptionally high support by the Members of the Parliament – 97% of votes for BONUS – reflects well the status of BONUS as the first model case for the development of science-based management of the European regional seas. BONUS thus serves the whole Europe, not only the Baltic Sea.
EXAMPLES OF GOOD PRACTICE IN NETWORKING

NETWORK OF CENTERS OF EXCELLENCE

√ Insisting on connecting the centers of excellence with the emphasis on *complementarity* - binding the Upper and lower Danube.
EXAMPLES OF GOOD PRACTICE IN NETWORKING

WATER LABORATORY- DREAM PROJECT

Upper and Middle Danube Responsible River Modelling Center (RRMC)

New Responsible River Modelling Centers
Examples of field study sites
Home base for research vessel with diving shaft

Lower Danube Responsible River Modelling Center
ESFRI RECOMMENDATIONS

• In planning to establish regional RIs, Member States should **better use the capacities of ESFRI** for setting-up upgraded evaluation procedures, peer reviews and/or new set of indicators related to their national and regional facilities.

• Considering that research and innovation are central to European growth and competitiveness, the ESFRI Regional WG strongly recommends **achieving a good balance between fostering existing centers of excellence and enabling new ones to emerge**, associated with regional RIs. The strategy is to link these facilities to 15 efficient networks and to stimulate the development of regional RIs in coordination with other interested regions. Therefore the important role of regional RIs (including e-infrastructures) in contributing to sustainable regional development, economic growth and attracting new generations of scientists and engineers cannot be understated.

• **ERIC – European research infrastructure Consortium – a good way to implement ideas**
EXAMPLES OF GOOD PRACTICE IN NETWORKING

CEEDUS

✓ good example of use of existing funds
✓ tool for increasing the mobility within Danube macro region

MISSION

• regional cooperation
• equal partnership
• quest for excellence
• pooling the best
• "laboratory" and "incubator"

CEEDUS I – 15,438 persons
CEEDUS II – 15,706 persons
= 31,144 persons
EXAMPLES OF GOOD PRACTICE IN NETWORKING

CEEPUS WORKING MODE

• regional university networks
• regional mobility

CEEPUS RESULTS

Scholarship months CEEPUS II – 28.601
Mob. applications CEEPUS II – 17.318
In the Global Competitiveness Report 2010–2011 (World Economic Forum) it is noted that the brain drain index seems to grow as one moves geographically from the West to the East of the Danube Region so the imbalance in student/staff/researchers mobility is to be expected.

It is of great importance to be aware of the situation in terms of incoming/outgoing mobility of students/staff/researchers within countries, in order to be able to better coordinate and identify ways of enhancing opportunities in the Danube region from which the entire group of countries will benefit.
1. “INCREASING THE MOBILITY IN THE DANUBE REGION”

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<th>COUNTRY FROM THE DANUBE REGION</th>
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1. “INCREASING THE MOBILITY IN THE DANUBE REGION”
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- All mobility programmes are expected to support the requirements of the Danube Strategy in respect to alignment of funds.

- The overall aim is to engage 20% of student population in mobility programs every year by the end of 2020.

- Special attention should be given to the concept of brain circulation in the Danube macro-region and stimulate mobility and networking among teaching staff, PhD students and young researchers to a greater extent.
1. “INCREASING THE MOBILITY IN THE DANUBE REGION”

There is nearly 3 million students in the Danube Region.

Only 1% (31,144 students) have participated in CEEPUS programme.

Therefore, there is a real need to increase mobility within the network.
In order to improve a volume of mobility in the Danube Region and to influence mobility flows, the focus should be given to the enhancement of the existing mobility programmes such as ERASMUS MUNDUS and CEEPUS, strengthening links and cooperation among universities within the existing networks such as *Danube Rectors’ Conference*. ERASMUS MUNDUS and CEEPUS exchange programs and their mechanisms serve as models to improve active ones and start new mobility networks that would be oriented towards the Danube Region and its priorities in particular. University networks, such as *Danube Rectors’ Conference* and *Alps-Adriatic Rectors’ Conference* are valued as highly relevant for setting the infrastructure and fostering advanced mobility cooperation windows.
2. “INTERNATIONALIZATION OF THE DRC CAMPUSES”

This proposal deals with the possibility of realization “virtual mobility” oriented towards the Danube region in particular, where researchers coming from widely-recognized institutions would exchange their views and best practices with respect to the priorities outlined in HORIZON 2020.
2. “INTERNATIONALIZATION OF THE DRC CAMPUSES”

The existing network of Danube Rectors’ Conference (DRC) universities is recognised as an ideal ground to expand and intensify links among researchers. At the same time it is prospective opportunity to start cooperation in the sense of joint challenging the Horizon 2020 priorities in the Danube macro-region and work on actions presented in the Priority Area 7 – Knowledge Society of the EU strategy for the Danube Region.
In the pilot phase of this project proposal it will target several DRC universities eager to trigger the idea and start the videoconference facilitated internationalization of Danube region universities. Those universities are expected to invite some of their eminent researchers to deliver a presentation and moderate virtual talks on our readiness or our excellence to meet the grand challenges: excellent science, competitive industry and better society.
TO CONCLUDE...

Higher education and research should create *hope*, from which society’s desire for growth and prosperity will emerge.
“It is not the strongest of the species that survives, or the most intelligent, but the one most adaptable to change”!

Charles Darwin
Thank you for your attention!

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