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Networks of Excellence: Past, present, future

The Report of the Expert Group on the Future of NoEs

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Outline

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- A reminder: NoEs in FP6
- Tasks and mandate, working method
- 'Integration' of research activities
- Networks of Excellence in FP6
- Key lessons learned
- Suggested next steps
- Joint Research Initiatives (JRIs)
- The spectrum of ERA instruments
- Recommendations

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Networks of Excellence: A reminder 1

FP6 decision:

"The purpose of Networks of Excellence is to strengthen and develop Community scientific and technological excellence by means of the integration, at European level, of research capacities currently existing or emerging at both national and regional level.

... A joint programme of activities could aim at the creation of a self-standing virtual centre of excellence that may result in developing the necessary means for achieving a durable integration of the research capacities."

Networks of Excellence: A reminder 2

FP6 Provisions for implementing NOE

"Networks of Excellence are designed to strengthen scientific and technological excellence on a particular research topic by integrating at European level the critical mass of resources and expertise needed to provide European leadership and to be a world force in that topic. This expertise will be networked around a joint programme of activities aimed principally at creating a progressive and durable integration of the research capacities of the network partners, while at the same time advancing knowledge on the topic."

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Tasks and mandate of the Expert Group

- Are the FP6 NoEs a true-to-type materialisation of what they were intended to be?
- Effective contribution to any durable integration of research resources and capacities and thus bringing ERA to its full potential?
- Role of NoEs in the new context of the ERA Green Paper, in consideration of other initiatives also designed to structure the ERA?
- How could the objectives for NoEs and the modalities of their funding through FP be adapted?
- More sustained support for successful projects?

Working method of the Expert Group

- Informal start Dec 2007, formal start Feb 2008
- 4 one day meetings, one two days meeting
- Analysis of existing evidence
- In-depth interviews (19) during meetings
- Questionnaire survey of research councils and research organisations (14/59)
- Group discussions and individual written contributions
- Final Report by end of September 2008

'Integration' of research activities

- ERA and 'integration' of research in Europe
- 'Critical' mass, 'fragmentation', 'integration'
- 'Critical mass'
- 'Fragmentation'
- 'Integration' at different levels ...
 - Within an institution
 - Moving beyond the local level
- Why going European?
 - Complementarity, equipment, data bases, training, ...
- > From deficits to opportunities ...

'Collaborative research' in FP6 in total:

59.626 participations in 5.003 contracts

FP6 NoEs:

5.153 participations in 171 NoEs

- Types of organisations involved in NoEs:
 - 56% universities
 - 29% research centres
 - 7,6% industry
- Themes: 35% ICT, 22% Life Sci, 13% NMP, 11% SustDev, 8% SocSci, 7% Food, 2% Aeronautics
- Variations of involvement between Member States

Activities and 'products' of NoEs A Joint Programme of Activities (JPA)

- Research agenda
- Pooling scientific equipment, joint use of data
- A favourable environment for young researchers
- Transnational education and training activities
- Science/policy interface, public awareness
- Supporting European & international visibility
- Different priorities and combinations of activities
- Durable integrated organisational structures???

Results of the NoE scheme in FP6:

- A great variety of NoEs ...
 - NoEs that developed comprehensive JPA and are advanced or achieved 'durable integration'
 - NoE that moved towards integration but time was too short
 - NoE that developed some scientific and other services
 - NoE that implemented an 'outsourced' research programme with some degree of partial coordination
 - NoE that supported small collaborative research projects with little or no coordination

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Difficulties:

- From the start, NoE concept defined ambiguously
- Large numbers of partners
- Time needed for 'sustainable integration'
- 'Integration' NoEs as legal entities...
- Involvement & commitment of parent institutions
- Ambitious requirements and little money
- Industry reluctant to participate
- Management of organisational change

Key lessons learned

- NoEs have shown the importance of intermediate collective research goods
- Safeguard achievements of NoEs!
- Refine the objectives and funding modalities
 - Allow different options for organisational integration
 - Provide funding based on real cost of activities
- Need for clear indicators for integration
- Utilize portfolio of sources for sustained support
- No general change of EU funding philosophy
- Design a new concept utilizing the NoE experience

Suggested next steps

- Launch a specific call for NoEs that are very advanced towards integration
- Launch call for Coordination/Support/ Actions providing an opportunity for safeguarding useful NoE activities
- No call for new NoEs
- Consider a refined new concept: Joint Research Initiatives (JRIs)

Joint Research Initiatives (JRIs) 1

Ideas to stimulate the discussion

- Science-led initiatives of slender alliances of universities and research organisations oriented towards long-term academic research – transnational 'virtual institutes'
 - Research areas: Mainly 'bottom up' some 'strategic' JRIs
 - Requiring ambitious research groups and committed parent institutions striving for virtual integration
 - Size: 3 to 7 partners, Duration: 7 to 9 years
 - Spectrum of joint activities: research infrastructure training
 - Funding for integration, research, res. infrastructure, mobility, training, communication, eventually management advice
 - Combination of funding options to be considered

Joint Research Initiatives (JRIs) 2

Ideas to stimulate the discussion

Obligatory spectrum of JRI activities

- Joint Programme for research and integration
- Sharing of equipment and joint new equipment
- Joint production and processing of data sets
- Career development of a 'new breed' of researchers
- Joint international education & training programmes
- International cooperation, attracting researchers
- Outreach to stakeholders and the general public

> A trans-national working environment

JRIs – Supporting measures

- Consultation between Commission and member states, funding organisations, universities and research organisations
- A common understanding of the concept!
- Briefing of evaluators
- Hearings of JRI candidates before selection
- 'Coaching for integration':
 - Governance structure, joint programme of activities, advanced communication instruments

The spectrum of ERA instruments

- Collaborative projects and CSAs
- MC Fellowships & networks and a conducive framework for researchers and mobility
- ERC starting and advanced grants
- Science-led Joint Research Initiatives
- Industry-led Joint Technology Initiatives
- European research infrastructures & capacities
- ERA-Nets, ERA-NET Plus, Joint Programmes
- Synergies between FP, CIP, Structural Funds
- An ERA of effective knowledge sharing
- An ERA open to and attractive for the world
- An ERA continuously learning and developing

Summary of recommendations

- 1. Launch a call for successful FP6 NoEs
- 2. Provide CSAs for successful NoE activities
- 3. Refrain from calls for new NoEs
- 4. Launch 'Joint Research Initiative' scheme
- 5. Engage in 'concertation' with member states and stakeholders on JRI concept
- 6. Utilize NoE experience for the new concept
- 7. Monitor development of ERA instruments

Thank you for your attention!

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