

From FP4 to FP7: What European Research Area?

*Strengthening the Innovators or
Funding the Established?*

Ronald J Pohoryles, ICCR Vienna & Paris
Hans-Liudger Diemel, ZTG Berlin

Zentrum Technik und Gesellschaft



Towards a European Research Area
Speyer 21 October 2005

The Purpose of the Presentation

The purpose of the presentation is

- To draw lessons from FP4 and FP5 based upon empirical findings: “Governance” as Interaction between Research Communities and the European Commission
- To understand the shifts from FP 5 to FP 6: “Governance” as Mutual Alignment of Élites and its pitfalls
- To develop perspectives for the European Research Area in FP7: Democratic Governance or Bureaucratic Regulations?

Zentrum Technik und Gesellschaft



Towards a European Research Area
Speyer 21 October 2005

OVERVIEW

- The European Research Area in FP4 and FP5
- From FP 5 to FP 6: What European Research Area?
- Perspectives for ERA in FP7
- Conclusions

Zentrum Technik und Gesellschaft



Towards a European Research Area
Speyer 21 October 2005

PART I
**THE "MAKING" OF THE EUROPEAN
RESEARCH AREA: SUCCESS AND
PITFALLS**

**Towards a European Research Area
Speyer 21 October 2005**



The European Research Area

“[The] centres of excellence are scattered across the continent and all too often their efforts fail to add up in the absence of adequate networking and cooperation. [...] now is the time to bring our endeavours together and to build a research and innovation equivalent of the "common market" for goods and services. That structure is called the European Research Area [...]"

(European Commission 2000, Making a Reality of The European Research Area)

**Towards a European Research Area
Speyer 21 October 2005**



The INNOCULT Project: Understanding Research Policies and Research Communities

- I. *The European Research Area as realised in the Framework Programmes*
- II. *Research Policies: From Government to Governance – Withdrawal of the State without Democratic Inclusion*
- III. *The Reaction of Research Actors (Universities, Research Centres & Institutes, Consultants)*
- IV. *The European Research Networks*

**Towards a European Research Area
Speyer 21 October 2005**



The INNOCULT Project: Understanding Research Policies and Research Communities

Data were collected from

- *document analyses,*
- *expert interviews, and*
- *a field study gathering information on four FP4 programmes representative for the entire FP:*

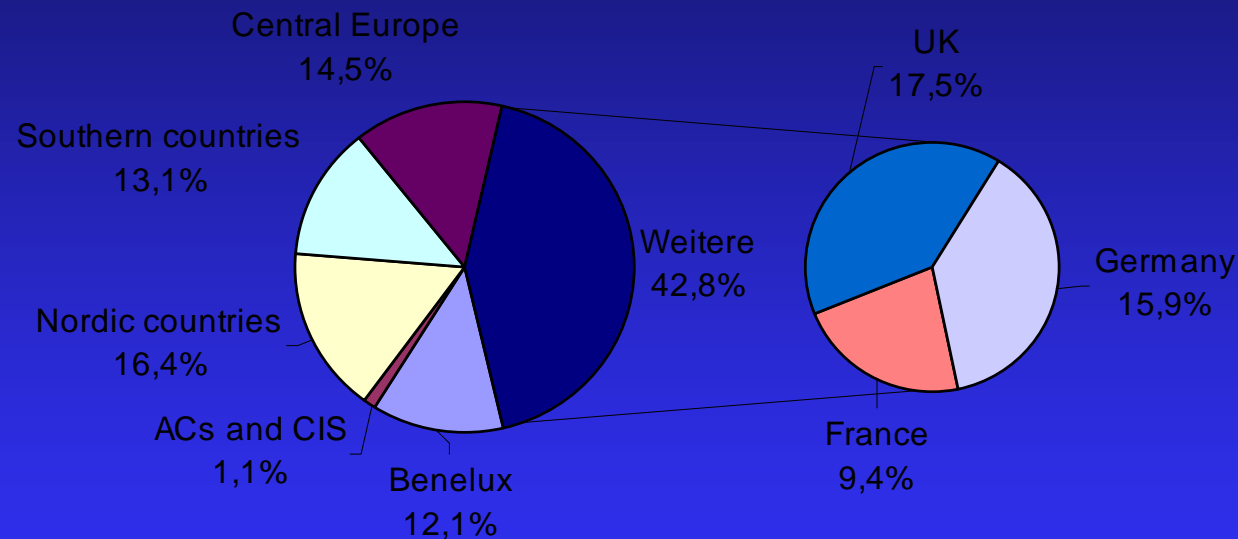
- *ESPRIT*
- *TRANSPORT*
- *ENVIRONMENT*
- *TSER*

By stratified sampling 874 of the 4'493 projects were selected, with a response rate of 45% (380 projects).

**Towards a European Research Area
Speyer 21 October 2005**



The "European Research Area" in FP 4 Regional Participation



Towards a European Research Area
Speyer 21 October 2005



Structuring Effects of FP4 and FP 5 preparing “The European Research Area”

The programme structure called for quite specific forms of “knowledge creation”

- The task orientation of the programme required inter- and transdisciplinary collaboration across Europe
- The knowledge producers comprised academics, applied researchers and consultants
- The consortium structures varied, but featured specificities that were appropriate for task-oriented high standard research.

Towards a European Research Area
Speyer 21 October 2005



Results of the structuring attempts of FP4 and FP 5 preparing the European Research Area

The organisation of the consortia showed very specific organisational features:

- Four out of five institutions (or 77.8 per cent) were involved in more than one project.
- Nearly one third of the sample organised a '*communitarian*' consortium, creating a common identity around the project without a specific partner taking a leading role (as opposed to individualistic approaches with little cooperation between the partners).

Results of the structuring attempts of FP4 and FP 5 preparing the European Research Area

- Researchers in countries with strong national funding systems were less interested in ERA
- Researchers in countries with weak national funding systems became more European and International

**Towards a European Research Area
Speyer 21 October 2005**



Features of FP4 and FP 5 structuring “The European Research Area”

- FP 4 and FP 5 supported academic climbers, innovators, parias of the national science systems
- Established national Mandarins were less interested and involved in the European Research System
- New “Nomenclatura” of European Scientists, which partially were not rooted in National Science Systems

Towards a European Research Area
Speyer 21 October 2005



Satisfaction of the Research Communities with the Governance of FP 4 and FP 5

Researchers were satisfied with the support of the European Commission in FP 4 and FP 5

Good communication with...

<i>European Commission</i>	54,5%
National agencies	30,8%

Efficient support from...

Own department	71,1%
<i>European Commission</i>	51,4%
National agencies	33,0%

Towards a European Research Area
Speyer 21 October 2005



Preparing the European Research Area

- The European Framework Programmes so far had as result the creation of “cornerstones” of the European Research Area”, the Trans-European Research Networks”.
- Already during the Fifth Framework Programme the research communities were well informed about the making of the Sixth Framework Programme.
- Though the views between the research actors varied according their institutional and, less, their national background, information and ambitions regarding the New Framework Programme was high.

**Towards a European Research Area
Speyer 21 October 2005**



The Researchers View: How to develop the New (Sixth) Framework Programme

Priorities for the development of a new Framework Programme as seen from the research communities:

Research Policy Programming should be based upon:

- Bottom-Up Orientation 58,3%
- Coordination with other Research Initiatives 43,8%
- Output Orientation 36,2%
- Increasing Prioritisation 22,4%

Towards a European Research Area
Speyer 21 October 2005



The European Research Area

Priorities for the development of a new Framework Programme as seen from the research communities:

Research Policy Programming should be based upon:

- Bottom-Up Orientation 58,3%
- Coordination with other Research Initiatives 43,8%
- Output Orientation 36,2%
- Increasing Prioritisation 22,4%

Towards a European Research Area
Speyer 21 October 2005



The first phase of FP 6: The new concept of the European Research Area and its pitfalls

Factories of Knowledge Production: From Knowledge Production to Knowledge Management

- Key Elements: The New Instruments „Networks of Excellence (NoEs)“ and Integrated Projects (IPs).
- The New Instruments were not appropriate for the „Transeuropean Research Networks“ created so far and for young and small research institutes and SMEs.
- „Old Boys Club“ and „Closed Shops“: Established National Players dominated FP6 so far.

Towards a European Research Area
Speyer 21 October 2005



Organisational Learning in Brussels

Marimon Report 2004:

- Critical view on the ‘the-winner-gets-it-all’ principle
- Critical view on ‘critical mass’ and ‘one-size-fits-all’
- Major concern about the waste of European research potential and about closed shops and decreasing competition

From NoEs and IPs back to STREPs

**Towards a European Research Area
Speyer 21 October 2005**



PART II:
TOWARDS A DEMOCRATIC GOVERNANCE
FOR THE SEVENTH FRAMEWORK
PROGRAMME

Towards a European Research Area
Speyer 21 October 2005



The major challenges for the Seventh Framework Programme

- Stimulation scientific excellence
- Mobilising the research communities and overcoming the barriers against SMEs, KBEs and (non-profit) research centres and institutes through financial and bureaucratic hurdles (bank guarantees, co-financing, etc.)
- Ensuring the participation of new creative research actors and the "Trans-European Research Networks"
- Improving the relation between technological, organisational and socio-cultural innovation

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



The major challenges for the Seventh Framework Programme (cont'd)

- Overcoming the Knowledge Gap, e.g. between regions or between "Old" and "New" Member States
- Flexibilisation of the Framework Programme by modifying the "Pre-competitiveness" paradigm
- Putting the European Research Council properly at work
- Ensuring democratic governance by participation of stakeholders and avoiding lobbyism (e.g. from Member States in favour of public research centres)

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



Types of Innovation

- Improving the relation between technological, organisational and socio-cultural innovation
- Relevant Questions:
 - ✓ Raising awareness for the necessity of innovation
 - ✓ Stimulating mutual learning processes
 - ✓ Overcoming the pre-competitiveness by overcoming the barriers between the different disciplines and against social sciences and humanities
 - ✓ Public Participation in Research Programming
 - ✓ Intellectual Property Rights vs. Democratic Transparency
 - ✓ The self-interest of the research communities

New Actors

- The emergence of new actors in the innovation field is obvious, but what power?
- Relevant Questions:
 - ✓ What logic the European Research Programmes?
 - ✓ What logic the new national actors, what role the traditional ones? How to avoid "Old Boys Clubs"?
 - ✓ New research actors and trans-disciplinary research networks
 - ✓ Public Participation in Research Programming
 - ✓ The role of NGOs

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



The role of articulated spatial scales in innovation dynamics and systems

- Research and Innovation Policies between globalisation and regionalisation
- Relevant Questions:
 - ✓ Understanding the relation between territories and other structural feature of innovation
 - ✓ What strategy the 'laggards', what role regions in the accession countries?
 - ✓ Regional innovation policies, cross-boundary regions and the role of the European regional policies
 - ✓ The European Agenda: competitiveness vs. cohesion and social inclusion?

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



Knowledge infrastructure and innovation processes

- Knowledge infrastructure is not just a combination of specific features, but depends on the socio-cultural and socio-political context – how to democratise polyarchic systems?
- Relevant Questions:
 - ✓ Social guidance of innovation processes: what innovation is acceptable for who?
 - ✓ Knowledge production as public interest service: who bears what costs, who has access, who has control?
 - ✓ What mechanisms of consensus building, what governance tools?
 - ✓ Diversity or “harmonisation”?

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



THE THEORETICAL DEBATE ON “GOVERNANCE”

- **Bureaucratisation Theories (Weber, Schumpeter):
The Sphere of Policy as Support of Political Leaders**
- **The Traditional Concept of Democracy, Lobbyism
and the Traditional Idea of Polyarchy (Dahl)**
- **Why Democracies don't work (Lindblom): The
Concept of Mutual Alignment**
- **Democracy and “Governance” in Multilevel
Democratic Systems: the End of Political and
Economic Power?**

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



UNDERSTANDING OF "SCIENCE AND RESEARCH GOVERNANCE"

■ The Idealistic Perception:

- ◆ (...) more is needed to improve the interactions between expertise, policy making and public debate. A number of important issues were identified by the Working Group: the definitions of 'expertise'; the meaning of 'democratising' in this context; the identification of needs and features of European reference systems; uncertainty and the Precautionary Principle; 'independence' and 'integrity'; the factors leading to effectiveness; and the role of the media. In all of these issues, important lessons can be drawn from past and ongoing experience.
- ◆ Seven aims were agreed, corresponding to 'democratisation' criteria: access and transparency; accountability; effectiveness; early warning and foresight; independence and integrity; plurality; and quality.

(Report of the Working Group Democratising Expertise, final version, R.Gerold & A. Liberatore, July 2001)

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



"DEMOCRATIC SCIENCE AND RESEARCH GOVERNANCE"

AIMS/PHASE	Programming	Implementation	Use
Access/ Transparency	X	X	X
Accountability	X	X	
Effectivness		X	
Foresight	X		X
Independence/ Integrity			
Plurality	X	X	
Equality	X	X	X

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



UNDERSTANDING OF "SCIENCE AND RESEARCH GOVERNANCE"

The alternative (realistic) perspective: Mutual alignment

- ◆ Science Policy is not an autonomous policy issue, but driven by general leading ideologies and policy programmes
- ◆ Research Policy is thus driven by the general political trends on the European, National and sometimes Regional level
- ◆ Key concept here is the mutual alignment of the political élites
- ◆ The policy instruments applied will reflect the general goals defined as political framework and will include commands, incentives and persuasion to implement these goals
- ◆ Thus the concept of the European Research Area can lead to re-nationalisation and oligopolisation of science and research communities

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



TWO CASE STUDIES OF SCIENCE AND RESEARCH GOVERNANCE: DEMOCRACY OR POLYARCHY?

The Key Concept: Polyarchy vs. Democracy (Dahl & Lindblom)

- ◆ Élite consensus ('Polyarchy') vs Democratic Governance
- ◆ 'Polyarchy' is in Dahl's terms a government system which might turn into democracy and reflects a progress vis-à-vis oligarchies (Dahl 1989), according Lindblom it is opposed to liberal democracies (Lindblom 1977).
- ◆ In Lindblom's terms: Dualistic power structure in the medieval history (the Church and the State) and in modern times (the State and the Corporations)
- ◆ The (political) élites are tied up in relationships of competition, interchange, and mutual alignment.



TWO CASE STUDIES OF SCIENCE AND RESEARCH GOVERNANCE: DEMOCRACY OR POLYARCHY? (cont'd)

- ◆ In Europe the political system thus becomes an even more complex network of authority as multi-level governance increases the groups participating in the process.
- ◆ The role of the research communities varies according to their power, their status and their position in the process of mutual alignment and not according to their research performance and capacity.

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



CASE I: THE SIXTH FRAMEWORK PROGRAMME

- ◆ Co-Decision of the Council and the EP in 2002 mentions two Communications by the Commission in 2000 (ERA; and Innovation in a Knowledge driven society), but not the Communication “Science and Society”
- ◆ Major changes based on the Commission proposal negotiated with the Council, the European Parliament, the Committee of the Regions, and the Economic and social Committee
- ◆ Key sentence is the “structuring effect” of the New Framework Programme
- ◆ “External Assessment” mentioned, but the selection of the experts was not transparent and the results of this assessment not publicly available and not quoted in the decision

CASE I: THE SIXTH FRAMEWORK PROGRAMME (continued)

- ◆ Participation within the framework encouraged, but the way the inputs were processed and the potential impact remained intransparent
- ◆ Any public debate was left to the Member States
- ◆ Key concept here is the mutual alignment of the political élites
- ◆ Incentives and disincentives: “The winner gets it all”
- ◆ The first evaluation (Marimon Report, 2004) is finalised, confirms criticism (as voiced already earlier by the research communities (cf Pohoryles, 2002)).



"THE GOVERNANCE OF FP6"

AIMS/PHASE	Programming	Implementation
Access/ Transparency	Very restrictive	Restrictive (reviewing)
Accountability	High	Low (referees not transparent)
Effectiveness	Possibly high	Low
Foresight	Unclear	Even unclearer
Independence/ Integrity	Unclear as transparency low	Remains to be seen as policy goals are clearly defined
Plurality	„Hollywood research“	Evaluation pending
Equality	Potentially high	Low

Towards a European Research Area
Speyer 21 October 2005



CASE II: THE 7th FRAMEWORK PROGRAMME

■ The Seventh Framework Programme

- ◆ Major changes to be expected again, creating a more technology oriented programme, but proposing the European Research Council
- ◆ Key elements will be
 - ◆ Individual research grants (ERC)
 - ◆ Infrastructures
 - ◆ Human Resources
 - ◆ Technology Platforms
 - ◆ IPs and NoEs
 - ◆ ERA-Net

CASE II: THE 7th FRAMEWORK PROGRAMME (cont'd)

- ◆ Again the selection of the experts was not transparent and the input of the ongoing FP6 evaluation remains unclear
- ◆ Any public debate is left to the Member States – information accessible though the ministries are not always forthcoming
- ◆ Ghettoising of the social sciences and humanities by turning them towards the ERC is envisaged
- ◆ Key concept here is again the mutual alignment of the political élites

"THE GOVERNANCE OF FP7"

AIMS/PHASE	Programming
Access/ Transparency	Very restrictive
Accountability	High
Effectiveness	Possibly high
Foresight	Unclear
Independence/ Integrity	Unclear as transparency low
Plurality	Decreasing
Equality	Potentially low

Towards a European Research Area
Speyer 21 October 2005



Scenario I: The European Research Area Supporting Bureaucratization and Re-Nationalisation

- Bureaucratization of the Framework Programme by putting the emphasis on financial and administrative control
- Externalising the responsibility by outsourcing the relevant elements of the research process and management to external consulting services and the coordinators...
- ...thus privileging the major national public players and increasing the hurdles for SMEs, KBEs and private (non-profit) research centres and laboratories (Bank Guarantees, under-funding of projects, maintaining the 50%-rule for private Full Cost calculating institutions).

**Towards a European Research Area
Speyer 21 October 2005**



Scenario I: The European Research Area Supporting Bureaucratization and Re-Nationalisation (cont'd)

- Ignoring “Old Boys (and Girls) Clubs” and “Closed Shops” deepening the knowledge gap.
- Marginalising the New Member States by administrative hurdles
- Keeping the industrial paradigm of “pro-competitive research” for all types of knowledge production and maintaining departmentalised programmes keeping the SSH out of “core” programmes
- Inappropriate functioning of the European Research Council.

**Towards a European Research Area
Speyer 21 October 2005**



Scenario II: The European Research Area Supporting the Research Communities and “Excellence”

- More continuity of the programmes and projects
- Designing a flexible programme structure not applying the industrial-technological and managerial logic to all types of research projects
- Reducing financial and bureaucratic hurdles for the participation of private actors (research institutes and SMEs); improving the funding structure of the “Full Cost” projects
- Additional targeted programmes for newcomers

**Towards a European Research Area
Speyer 21 October 2005**



Scenario II: The European Research Area Supporting the Research Communities and "Excellence" (cont'd)

- Integration of Social Science Knowledge and Humanities into the whole Framework Programme
- Ensuring the well functioning of the ERC by democratic governance
- Strengthening the national and regional ties of international teams
- This can be achieved by democratic governance involving the research communities, economic and social actors in all their variety.

**Towards a European Research Area
Speyer 21 October 2005**



Conclusions

- The importance of the logic of the actors
- Relevant Questions:
 - ✓ The policy dependence of science and research systems
 - ✓ Research organisation and research funding on the European, the national and the regional level
 - ✓ The answer of the research communities, the "Trans European Research Communities"
 - ✓ The lobbying of the industries and the Social Actors
 - ✓ The answer of the society
- Finally, the network of European Polyarchy

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft



MANY THANKS FOR YOUR PATIENCE!!

- INFORMATION ON THE INNOCULT PROJECT CAN BE OBTAINED ON THE PROJECT WEBSITE
[HTTP://www.iccr-international.org/innocult](http://www.iccr-international.org/innocult)
- or by contacting the authors:
- **Ronald J Pohoryles**, The Interdisciplinary Centre for Comparative Research in the Social Sciences
r.pohoryles@iccr-international.org, or
- **Hans-Liudger Diemel**, Zentrum Technik und Gesellschaft der Technischen Universität Berlin
dienel@ztg.tu-berlin.de
- or by ordering the publication
INNOVATION - THE EUROPEAN JOURNAL FOR SOCIAL SCIENCE RESEARCH (Vol. 15, No. 4, December 2002)

Towards a European Research Area
Speyer 21 October 2005

Zentrum Technik und Gesellschaft

