

Possibilities and Constraints of NoEs as exemplified by PRIME

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NoEs (Networks of Excellence) in context

- One of the tools in ERA
 - Other examples: IPs, ERA-NETs, TPs, ERC, OMC
- ERA (European Research Area):
 - Major goal: to promote competitiveness
 - The creation of an "internal market" in research, with the aim of increasing cooperation, stimulating competition and achieving a better allocation of resources
 - Restructuring European research fabric, coordination of national research activities and policies, and
 - Development of European research policy

Objectives of NoEs

- Strengthen scientific and technological excellence on a particular research topic by integrating at European level the critical mass of resources and expertise to provide European leadership and to be a world force in that topic
- The expertise will be networked around a joint programme of activities, aimed at creating structural change and a durable integration of the research capacities of participating organisations

PRIME

- PRIME = Policies For research and Innovation in the move towards the European Research Area
- 2004-08
- Nearly 50 member institutes
- Objectives:
 - Lower the entry cost for excellence by integrating smaller and younger teams in the NoE
 - Establish a critical mass of leading researchers with high international visibility, however, focusing on the new generation of senior researchers
 - Make pioneering contributions on key emerging issues in research and innovation policy
 - Promote lasting co-operation and integration

Basic view of NoEs

- An intermediary between the EU Commission and the member labs (institutes), a hybrid quasi-organisation
- It has restricted entry
- It distributes money to members through calls, based on competition
- Incentive mechanisms include status, money, promotion of research agendas, collusion of joint research interests etc

NoEs, research funding agency and research performing organisation

	Research funding agency	Research performing organisation	NoE
Who gets money	outside organisations and researchers	internal divisions	member labs
Entry barriers; inclusion/exclusion criteria	low entry barriers: anyone can apply for money	restricted entry: part of a hierarchy	restricted entry: inclusion of members by criterion of excellence
Distribution mechanism	competition through a call	hierarchy	competition through a call
Incentive mechanisms	money	fiat, money	status, money, promotion of research agendas, collusion of joint interests etc.
Position in a principal-agent relationship	intermediary	agent	intermediary

Categorisation of organisation types

		Entry barriers	
		Low barriers, self-registration	High barriers, restricted entry with formal entry criteria and selection
Incentives	Strong incentives in terms of funding	<p>A</p> <p>Funding agency 'intermediary'</p> <p>Low degree of integration</p>	<p>B</p> <p>Research organisation 'agent'</p> <p>World-renown research organisation ('centre of excellence') 'agent'</p> <p>High degree of integration</p>
	Weak incentives in terms of funding; intangible incentives	<p>C</p> <p>Scientific association 'quasi-agent'</p> <p>Low degree of integration Wide expansion of membership</p>	<p>D</p> <p>NoE 'intermediary'</p> <p>Exclusive scientific club 'quasi-agent'</p> <p>By default, low degree of integration</p>

Integration

- Objective: obtain excellence through integration
- Linking integration and excellence: assumption that they are related; integration is optimal when it best advances excellence ('the critical mass'). Underlying notion of integration as a continuum and a non-linear characteristics
- Integration: both organic processes and coordination are important
- Conceptual and social integration
- Integration at the level of research, strategy, and management
- Integration is something else than just networking; networking can be a means to achieve integration

Institutional focus

- NoEs are expected to integrate institutions and to commit the leaders of member institutions
 - Assumption: research organisations where the leaders have strategic power to direct activities; model taken from enterprises
 - The reality: bottom-up agenda setting at project level

Challenges

- Difficulties in engaging institutions (particularly in social integration) because
 - management practices are embedded in the social and legal systems;
 - Furthermore, institutes are highly dependent on external funding, which leads to bottom-up agenda-setting in research
- Difficulties in funding projects and synchronising funds from different sources

To succeed, NoE needs other tools of ERA

- NoEs have weak incentives in terms of money; assumption that other ERA funding tools are available
- However, so far, there have been fragmented attempts at experimenting with new co-funding schemes (e.g. ERA-NETs); obs. such developments have been rapid

Conclusions

- The objectives are indeed ambitious (obs. difference between networking and integration)
- Short duration; NoEs can start new activities during the first 2-3 yrs; at least two five-year periods needed to produce more durable impacts
- Weak design of this instrument by the EU Commission (esp. in terms of money): NoEs need other ERA (funding) instruments to deliver what is expected
- The latter means that there need to be coordinating mechanisms/structures among the various ERA instruments

Conclusions

- In the absence of effective ERA instruments, NoEs may remain another networking instrument without durable impacts in restructuring the research landscape (box D in the categorisation table)
- Nevertheless, it is likely that successful NoEs, which have a strategic view and policies, will make a difference in collaboration patterns and relative status of institutions and researchers in their research area