
Presentation of Key Findings

In relation to an Evaluation of the Pertinence and Impact of the EU Support Actions to Research Infrastructures in the 6th Framework Programme

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Overview and focus of the presentation

Overview:

- Brief description of the study and the methodology
- Description of the study findings
- Learning for future

Focus:

- Present impacts and factors that influenced the realisation of impacts

Objectives of assessment

- Assess the **pertinence** of the EU support schemes and the Added Value of European action;
- Gain an overview of the **impact** that the EU support actions have had on scientific communities, research infrastructures, research policy, the economy, industry and wider society; and
- Analyse the **structuring effect** of support actions with regards to the European Research Area and provide Commission with recommendations for further Community actions regarding RIs.

Background to the evaluation

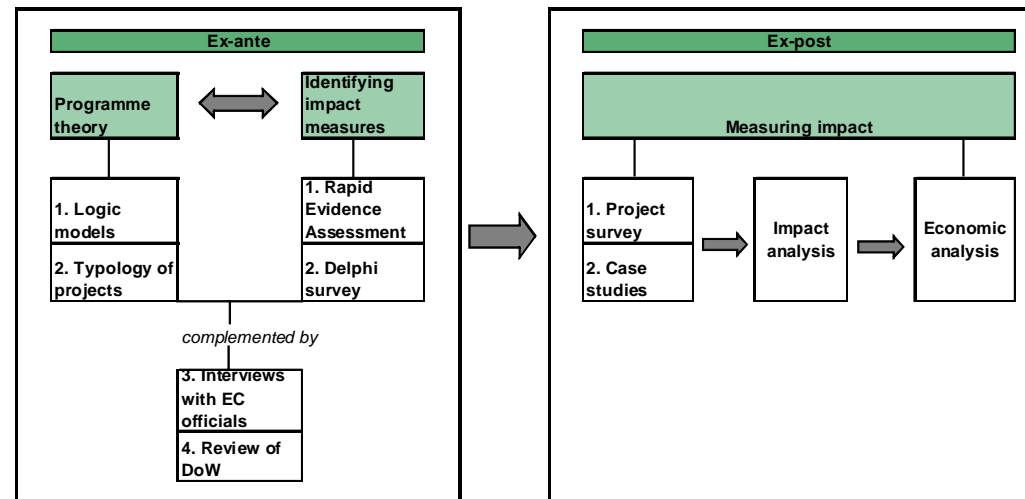
- 22 months in length (July 2007 – April 2009)
- Undertaken by Matrix Insight, Rambøll Management and Manchester Institute of Innovation Research
- First ever assessment of European RI funding which will provide a base line for further development of an evidence base
- 83 projects included, as shown in the table

FP6 RI - Number of projects by scientific domain and support scheme							
Scientific domain	Integrating activities		Communication Network Development		Design studies	Construction of new infrastructures	Total
	CA	IB	CA	IB	SSA	SSA	
Astronomy, Astroparticles and Space Technology	3	3			4	1	11
Physics, Material Sciences and Analytical Facilities	2	4			3	1	10
High Energy and Nuclear Physics		5			3	1	9
Engineering, Energy and Nanotechnologies		4			2	1	7
Environment and Earth Sciences	3	6			2	1	12
Life Sciences and Biotechnologies	2	5			3	3	13
ICT – e-infrastructures			2	11			13
ICT and Mathematics		2			1		3
Socio-economic Sciences and Humanities		3			1	1	5
Total	10	32	2	11	19	9	83
Total / Evaluation study	42		13		28		83

Overview of methodology

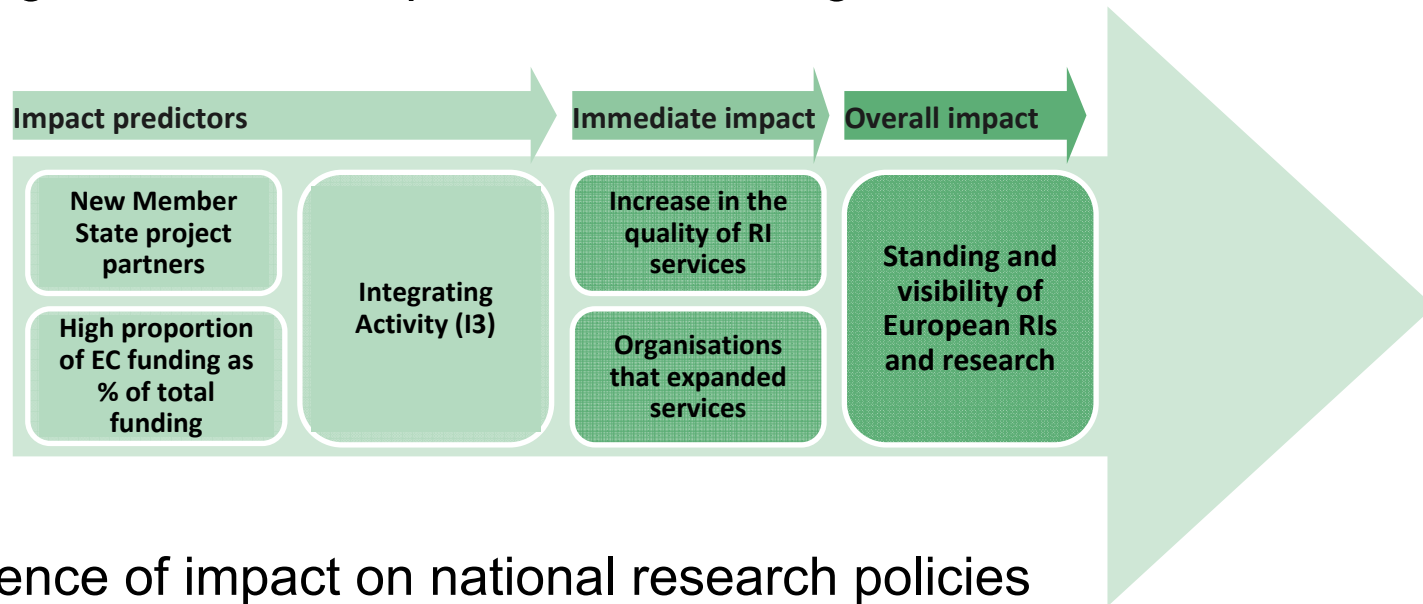
The study's main components consisted of:

- Conceptualising the FP6 'programme theory' (Theories of change, typologies)
- Establishing appropriate definitions and measures of impact
- Measuring and understanding the achievement of impacts (impact analysis)
- Understanding impacts in relation to costs (economic analysis)



Overview of study findings

- Strong evidence of impact on the improved standing of European RIs and European research
- Strong evidence of impact on networking



- Evidence of impact on national research policies
- Moderate and isolated cases of economic and industrial impacts
- Weak evidence of wider societal impacts

Pertinence

Key findings:

- The programme has met its objectives in relation to the needs of the research community via facilitating contact / networking
- Wider aspirations for the programme in relation to making a broader economic and social impact have not been realised
- A majority of projects fully met their objectives and included the most relevant participants

Key conclusions:

- Programme effects, particularly pertaining to European Added Value, do not appear to be sustainable with most projects relying on further EC funding to continue with European level networking and cooperation

Impact on Research Infrastructures (i)

Key findings:

- Strong evidence of impact on the improved standing of European RIs and on European research
- Increase in the number of young researchers working in the participant organisations
- Better quality research data and expansion of services offered to users
- Little evidence of universal increase in the remote use of RIs
- Increase in quality of RIs in New Member States realised to some extent

Impact on Research Infrastructures (ii)

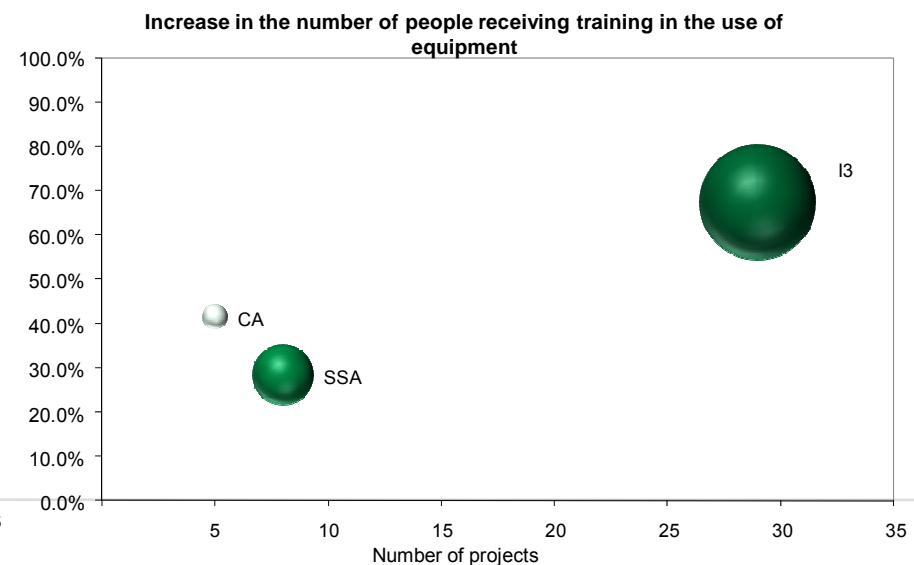
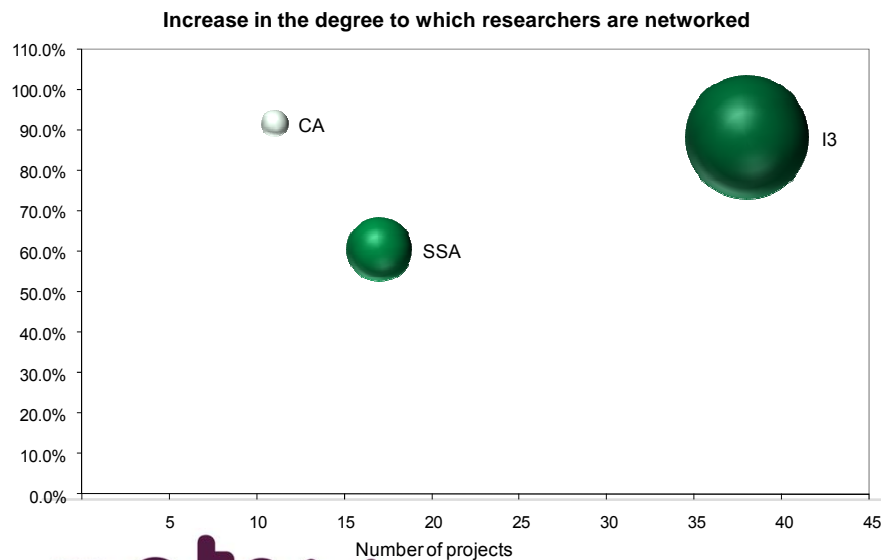
Key conclusions:

- Investment in I3 projects and inclusion of NMS increases impacts on RIs
- EC funding also plays an important role in achievement of impacts on RIs
- The scale and pervasiveness of the impacts on RIs at programme level were high, especially considering the timing of the evaluation

Impacts on Science Communities (i)

Key findings:

- Strong evidence of increase in the degree to which researchers are networked
- National RIs opening up to European and other international scientific users
- Increase in the number of scientists receiving training in the use of equipment



Impact on Science Communities (ii)

Key conclusions:

- Investment in I3 projects and EC investment in general plays a key role in achieving impacts on science communities
- Increase in number of users through opening up national RIs to new geographical users, although more could be done in future to ensure that new user communities gain access to existing RIs

Impact on Research Policy (i)

Key findings:

- Evidence to suggest that projects influenced R&D policies at regional, national, European and international levels
- The effect on policy-making in domains beyond that of immediate focus for the projects was small

Impact on Research Policy (ii)

Key conclusions:

- Ability to influence on research policy increases towards the end of the project
- E-infrastructure projects were most likely to influence research policies
- One key driver was the 'endorsement effect' achieved through the EU support itself; it helped to raise the profile of the RI or the project either nationally or internationally
- Impact on policies were limited to the domain addressed by each RI

Economic impacts

Key findings:

- Some evidence of projects having had an impact on relations with industry partners
- Changes in the level of industry participation not prominent
- Joint projects with industry were realised within few projects
- Some evidence of industry having benefited from the RIs
- Little evidence of projects having produced commercialisable outcomes
- Some evidence of scientists moving to employment in industry

Key conclusions:

- Difficult to determine factors of the FP6 RI programme that influence achievement of economic and industry impacts
- Investment linked with construction and design positively influenced industry participation in projects

Societal impacts

Key findings:

- Most projects had public dissemination strategy in place
- A minority of projects had realised some form of liaison with local communities
- Concrete examples of wider societal impacts were very limited and tended to focus on medical advances, the environment and/or safety issues

Key conclusions:

- Evidence of possible future realisation of impacts upon wider society but little actual impact systematically being achieved
- Liaison with local communities is important but ultimately not enough to ensure wider societal impacts from this type of investment

Structuring Effect and NMS

- NMS were mostly involved in:
 - High-Energy Physics projects 88.9 % (8 out of 9 projects)
 - E-infrastructures projects 61.5 % (8 out of 13)
- NMS tended to participate in projects with a larger number of partners than the average (27 vs. 19 partners)
- NMS tended to participate in projects with larger budgets (€11.5 million vs. €8.1 million)

European Added Value & Structuring of ERA

Key findings:

- European funding enabled certain activities that would not have been possible otherwise
- Commission funding increased RIs' visibility that helped to establish research fields at European level
- Researchers from New Member States were more involved in European communities and networks than before
- There was an increase in the degree to which researchers networked
- The European support has enabled scientists, particularly in the NMS, to undertake new, more or better research

European Added Value & Structuring of ERA

Key conclusions:

- EC funding increased the visibility of participant organisations and generated operational as well as wider European Added Value through support to activities otherwise not viable at European or International level
- EC funding enforced the structuring of the ERA via the strengthening and support to networking of researchers and through encouraging involvement of New Member states

Key recommendations

- **Improving efficiency and pertinence:** More effort should be made for projects to include new user communities in areas of research outside of traditional user groups in order to promote interdisciplinary approaches.
 - **Strengthening of impact:** If Community actions aim for longer-term impacts to become a reality, research consortia should be encouraged to think about their wider relevance to society, industry and European policy-making. This could be done during project planning and further encouraged via targeted support actions.
 - **Enhancing European Added Value:** To reinforce European Added Value, the Commission should invest in activities similar to Integrated Infrastructure Initiatives that capitalise on the effect of networking within a wide consortium of partners and as part of a mix of joined up activities.
 - **Enabling further structuring:** New Member State participation in projects should be promoted and their visibility increased as this encourages national investment in research at national level in these countries.
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Learning for future: methods (i)

- More reliable impact indicators should be developed, which are not opinion-based
- Benchmark data should be developed in order to measure improvement
- Data series should be developed in order to monitor progress over time and detect influence of new measures
- Indicators equally applicable to different policy instruments should be developed in order to compare progress across policy areas
- Indicators specific for different policy instruments should be developed to measure success in specific policy area

Learning for future: methods (ii)

Examples of effect:

- Robust impact indicators that can be compared to benchmark data will enable better measurement of impact in the future. This facilitates assessing the level of improvement, and ensures the measures are free from potential opinion based bias
- Development of data series will help monitor progress over time, and provide the opportunity to try and detect influence of new measures that have been implemented over the years
- Developing indicators that are equally applicable to all policy instruments will enable comparisons across all instruments. However, indicators that specific to particular policy instrument will enable more in depth measurement of impact within particular policy instrument

Learning for future: targets and data collection (i)

- (Policy) targets should be clearly communicated and quantified to facilitate joint understanding of impact
- Data collection and monitoring tools should be developed in order to measure impact accurately in a standardised way
- Comparative data measures should be developed to enable comparison across sectors and countries

Learning for future: targets and data collection (ii)

Examples of effect:

- Clear understanding of the policy target and its quantification are essential pre-requisites to collecting accurate data based on shared understanding
- Measuring impact in a standardised way (facilitated by data collection and monitoring tools) will ensure that comparisons made are accurate and comparable. This also provides a joint database where data can be stored
- Comparative data measures that enable multinational and cross - sectoral comparison will facilitate large scale overview of impacts, and these can be develop onto a benchmark against which each sector or country could be compared to

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