

Economic evaluation

8th e-Infrastructures concertation meeting
4 November 2010, Geneva

Krystyna Marek
European Commission



e infrastructure



European Commission
Information Society and Media

"The views expressed in this presentation are those of the author and do not necessarily reflect the views of the European Commission"

Programme evaluation at the EC

The EC regularly evaluates the results and impacts of its policies and initiatives, in order to improve decision making.

Evaluation is vital to keep EU policies effective and ensure transparency and democratic accountability.

Evaluation addresses:

- Relevance
- Effectiveness
- Efficiency
- Utility
- Sustainability



Evaluation: why?

- ✓ To ensure that EU actions are effectively tackling the real challenges that the increasing complexity of reality entails
- ✓ EU policy objectives are very ambitious, requiring greater synergies and coherence between different initiatives.
- ✓ EC is committed to build citizens' confidence in Europe.



Evaluation: what for?

- ✓ Planning, designing, implementing EU policies
- ✓ Enhancing the legitimacy of decisions and the accountability of decision-makers
- ✓ Supports the EC in better communicating the added value of the EU to the European citizen.



Types of evaluation

✓ **Prospective** (ex-ante evaluation or impact assessment)

To assess if the objectives correspond to the needs and if the proposed instruments will attain the objectives effectively at a reasonable cost

✓ **Retrospective** (interim or ex-post evaluation)

To improve the quality of the intervention and account for the results achieved



e-Infrastructures context

✓ Framework programme 7 (2007 – 2013)

Capacities programme

thus Research Infrastructures

including e-Infrastructures action

✓ e-Infrastructures and IST-RTD



Characteristics of e-infrastructures

Infrastructure: “The basic systems and services ... a country or organisation needs to work efficiently” Cambridge dictionary

▪ **Maturity**

- Ubiquity
- Accessibility
- Transparency
- Reliability

Notion includes technical, legal and organisational systems, as well as social and cultural dispositions

▪ **Formation**

- through connecting isolated systems and networks

...for Research

- to support excellence and innovation
- production quality ICT-based services for all researchers

e-Infrastructures impact measures

- ✓ Communicate to Member States and European Parliament what has been the impact of e-Infrastructures
- ✓ There is a clear need to assess the EC investments in the area of e-Infrastructure and to use this as feedback in developing EU policy in this area.
- ✓ Quantitative ex-post evaluation of the impact of e-Infrastructures is lacking.



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

- ✓ Study analysed the pertinence, impact and European added value of the RI programme
- ✓ e-infrastructures (Communication Network Development) evaluated as part of Research Infrastructures
- ✓ Study recommended that concrete impact measures based on existing and new data sources were developed
 - ✓ This included establishing a set of indicators for which comparable time series data can be collected
- ✓ Evidence specific for e-Infrastructures is needed
- ✓ Research consortia are encouraged to think about their wider relevance to society, industry and European policy making



Ongoing e-Infrastructure initiatives

✓ Two projects:



ERINA+ aims to evaluate the impact of e-Infrastructure funded projects using the socio-economic methodology already experimented within the ERINA study.



eNventory establishes European eInfrastructures Observatory to monitor the development and impact of e-infrastructures.

✓ Study on Development of impact measures for e-Infrastructures (currently being evaluated)

ERA indicators for e-Infrastructures

✓ Indicator for ERA objective 5:

Develop world-class research infrastructures (including e-Infrastructures) and ensure access to them

$$I_{S(e-Infra)} = 1/3(\overline{netcap}) + 1/3(\overline{cpucap}) + 1/3(\overline{compcap})$$

2005	100,0
2006	157,7
2007	362,5
2008	481,8
2009	908,1
2010	1750,9

✓ Indicator for ERA objective 9:

Enhance knowledge circulation across Europe and beyond

$$I_{9(e-Infra)} = 1/2(\overline{trafficEU}) + 1/2(\overline{trafficbeyondEU})$$

2005	100,0
2006	161,1
2007	222,3
2008	273,5
2009	327,3

✓ FP indicator to monitor ERA

Community budget devoted to e-Infrastructure as compared to GBAORD

	2007	2008
GBAORD	1.55 ^s	1.52 ^s
e-Infra in FP7	1,13	1,13



Objectives of this session

All e-Infrastructure projects are called to this important exercise to:

- ✓ Develop Common understanding about impact assessment
- ✓ Openly discuss the methodology
- ✓ Agree on indicators and data sources



How this session is organised

✓ Sequence

- Presentation of prof. Erik Bohlin, Economics of innovation and technology
- Presentation of Jane Nicholson, Experience of funding agencies
- Presentation of the ERINA+ project
- Presentation of the eNventory project
- User perspective: ESA
- Experience of e-Infrastructure flagship projects: GEANT, EGI, PRACE, OpenAIRE
- Session on Socio-Economic evaluation and open discussion animated by ERINA+ and eNventory



For further information



www.cordis.europa.eu/fp7/ict/e-infrastructure/



e-infrastructure



European Commission
Information Society and Media