Evaluating the contributions of research infrastructures to the Framework Programmes

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Evaluating the contributions of research infrastructures (RI): Relating programme objectives to outcomes in FP7

Within single programme area:
- **Overarching goals of “Capacities – research infrastructures”**
  - Optimise development of the best RI existing in Europe
  - Create new RI of pan-European interest in all fields of science and technology
  - Expand use of RI throughout European Research Area
  - Help industry to strengthen its base of knowledge and technological know-how.

Across programme areas:
- **Overarching goals of other Specific Programmes:**
  - Cooperation: promoting scientific and technological collaborations
  - People: mobility, training and career development
  - Ideas: strengthening excellence in frontier research

Beyond programme boundaries:
- **Long-term socioeconomic impacts beyond framework programme:**
  - Knowledge transfer – RIs supply business opportunities for industry
  - Innovation – RIs provide facilities for industry partners (instrumentation, testing, demonstration) to develop innovative products and services
  - Knowledge base for policy-making, planning, legislation
  - Effects on local and regional economic development
Within programme area „Capacities“ - outcomes in FP7

Midterm evaluation of FP7:

- Consolidation of ESFRI
  - Inclusion of a broad spectrum of disciplines
  - Addition of new projects to ESFRI list of priority RI in Europe
- New legal framework for RI (ERIC)
- Expansion of access to RI – more users, also across sectors
  - BUT: numbers of users are very uneven, depending on specific RI and sector
  - Access for what purpose?
Across programmes – how do research infrastructures contribute towards achieving goals of other specific programmes?

**Cooperation:**

**Collaborative research project:** Nano-Model (2008-2011 – Coordinator: BASF, 11 partners) – Develop, implement and validate multi-scale methods to compute the mechanical, thermochemical and flow behaviour of nano-filled polymeric materials based on the chemistry of selected model systems using neutron-scattering and simulation techniques

**People:**

**Marie Curie Initial Training Network:** DITANET (2008-2012 – Coordinator: University of Liverpool, 26 partners) - Development of novel diagnostic techniques and beam instrumentation for future particle accelerators

**Ideas:**

**ERC Starting Grant:** PHYTOCHANGE (2008-2012, PI: Dr. Bjoern Rost, AWI) – role of phytoplankton in ocean-atmosphere gas exchange with implications for climate change
Beyond the framework programme – how to capture the long-term socioeconomic impacts?

Obstacles:

- Definition of „long-term socioeconomic impact“?
- Lack of consolidated empirical data
- Lack of methodology to analyse them
- Appropriate time frame?
- Stakeholders?
- Appropriate indicators? (e.g. economic, social, human capital, environmental, human welfare)

Possible strategies:

- Gather more empirical data to validate evaluation framework
- Systematic, continuous monitoring
- Basis for development of ex ante evaluation guidelines?
- No „one size fits all“: Evaluation framework specific to sector, discipline or type of RI