European Roadmap for Research Infrastructures

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What is the European Roadmap?

The ESFRI roadmap will identify new pan-European Research Infrastructures (RI) or major up-grades to existing ones, corresponding to the needs of European research communities in the next 10 to 20 years covering all scientific areas, regardless of possible location.
Objectives of European Roadmap

- Identification of new research infrastructures or major upgrades which correspond to the needs of European research communities
- Tool for decision makers, preventing over-provision of facilities in particular areas
- Providing a focus for long term budgetary planning by funding actors
Working method

- ESFRI is advised by 3 Roadmap Working Groups (RWG) covering:
  - Physical Sciences and Engineering (PSE)
  - Biological and Medical Sciences (BMS)
  - Social Sciences and Humanities (SSH)

- Consideration of cross-cutting issues and close contacts with e-IRG
Working method (continued)

- Objectives of Roadmap Working Groups
  - Assess current national roadmaps (e.g. UK, Germany) and other analyses (e.g. from ETPs)
  - Identify gaps and create Expert Groups if necessary
  - Follow stage gate guidelines to produce evidence and advice for new Infrastructures
  - Report to ESFRI by early summer 2006

- Clear timetable: ESFRI aims to publish first roadmap early Autumn 2006 with regular updates
Research Infrastructures definition

- "Facilities", "resources" or "services" that are needed by the scientific community for development of leading-edge research, as well as for transmission, exchange and preservation of knowledge;
- are generally characterized by large investments (for the given domain) and long project lead-times with associated needs for long-term support.
The approach

- Proposals will be identified either by national authorities, by the Roadmap Working Groups or Expert Groups.
- Spontaneous proposals have to be sent to the national delegates of ESFRI and will be filtered by them.
- All opportunities should be identified although different communities are at different stages of maturity.
ESFRI Roadmap Procedure

ESFRI request for a stage-gate process

Roadmap Working Groups

Possible analysis by Expert Groups

Filter by national delegations

Spontaneous proposals for pan-European projects

EIROs, Nuppec, ESF, e-IRG, national Roadmaps + other EU level roadmap, Global Projects, etc…

(simplified version)
ESFRI Roadmap Procedure (continued)

**Summer 2005**

1. RWGs + Expert Groups as appropriate
   - Scientific Case
     - Concept mature?
       - yes
       - yes
       - Consultation process

   - RWGs confirm their vision
     - yes
     - Report to ESFRI

   - Reviewed and agreed by ESFRI?
     - yes
     - Introduction in the Roadmap

**End Spring 2006**

(simplified version)
Criteria for entering the Roadmap

**Scientific Case:**
- Must be a major infrastructure for that particular scientific community (uniqueness)
- Must be a multi-user facility of great scientific interest (future needs)
- Must be of pan-European interest

**Maturity of Concept:**
- Must be technologically + financially feasible
Further decision making criteria

- Potential contribution to socio-economic objectives (sustainable development); Impact on human capacity and training
- Estimated construction, operating and decommissioning costs (multi-annual plan)
- Appropriate management structure and mechanisms for Member States to join at the start or during operation
The Roadmap and FP7

2005
Identification of needs of the scientific community

2006
Mature Projects
The ESFRI roadmap

2007...
An identification process for pan-European RIs
Facilitation of decision making between stakeholders

2008 ...
Funding and joint implementation of actions

Development of EU policies

FP7
Useful links

- Research Infrastructures on CORDIS (FP6)
  http://www.cordis.lu/infrastructures/
  http://www.cordis.lu/ist/rn/

- ESFRI (European Strategy Forum for Research Infrastructures)
  http://www.cordis.lu/esfri/
  http://www.e-irg.com

- EIB (European Investment Bank)
  http://www.eib.org