

ESFRI

European Strategy Forum
on Research Infrastructures

European Roadmap for Research Infrastructures

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17 November 2005

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

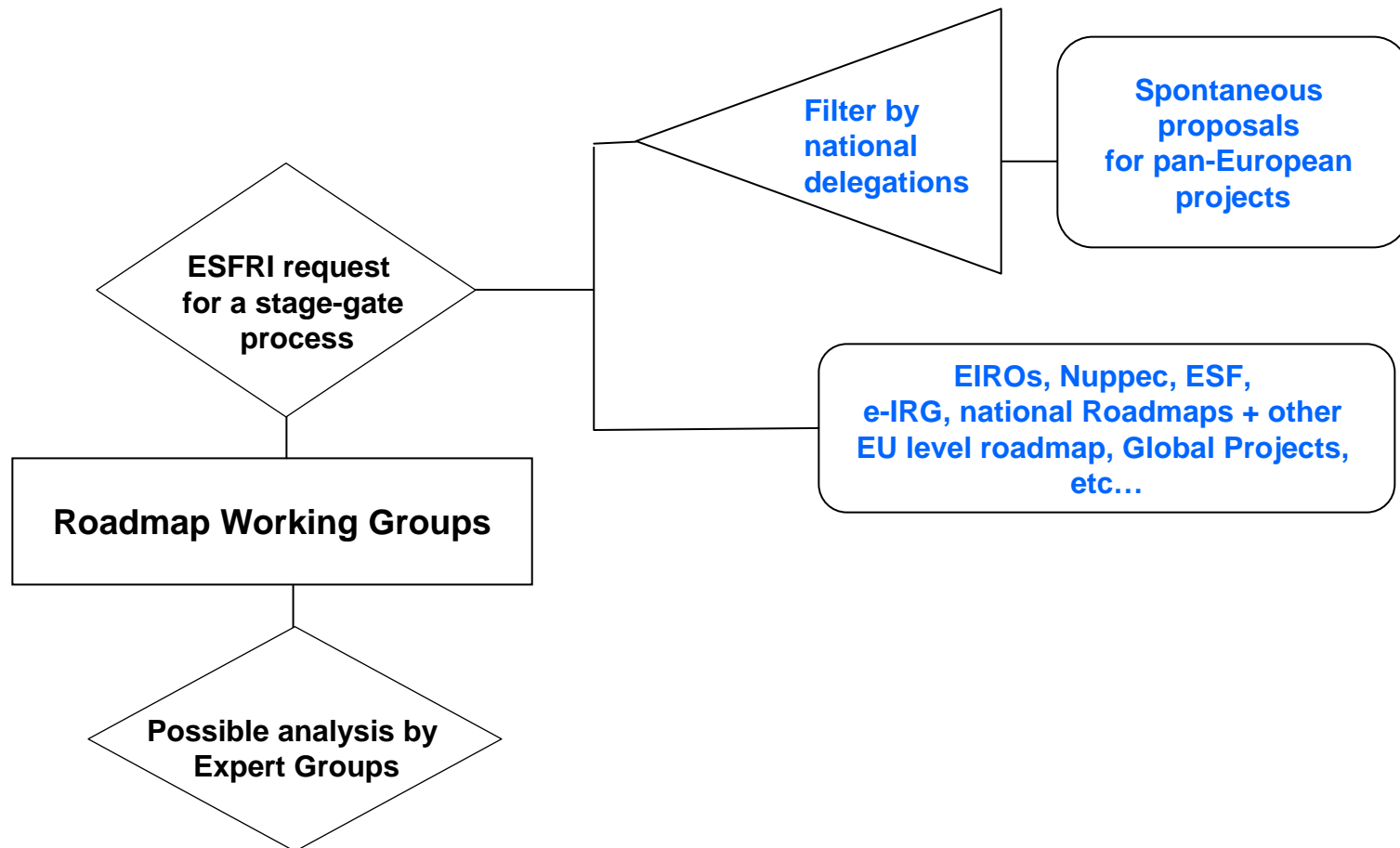
Research Infrastructures definition

- "*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

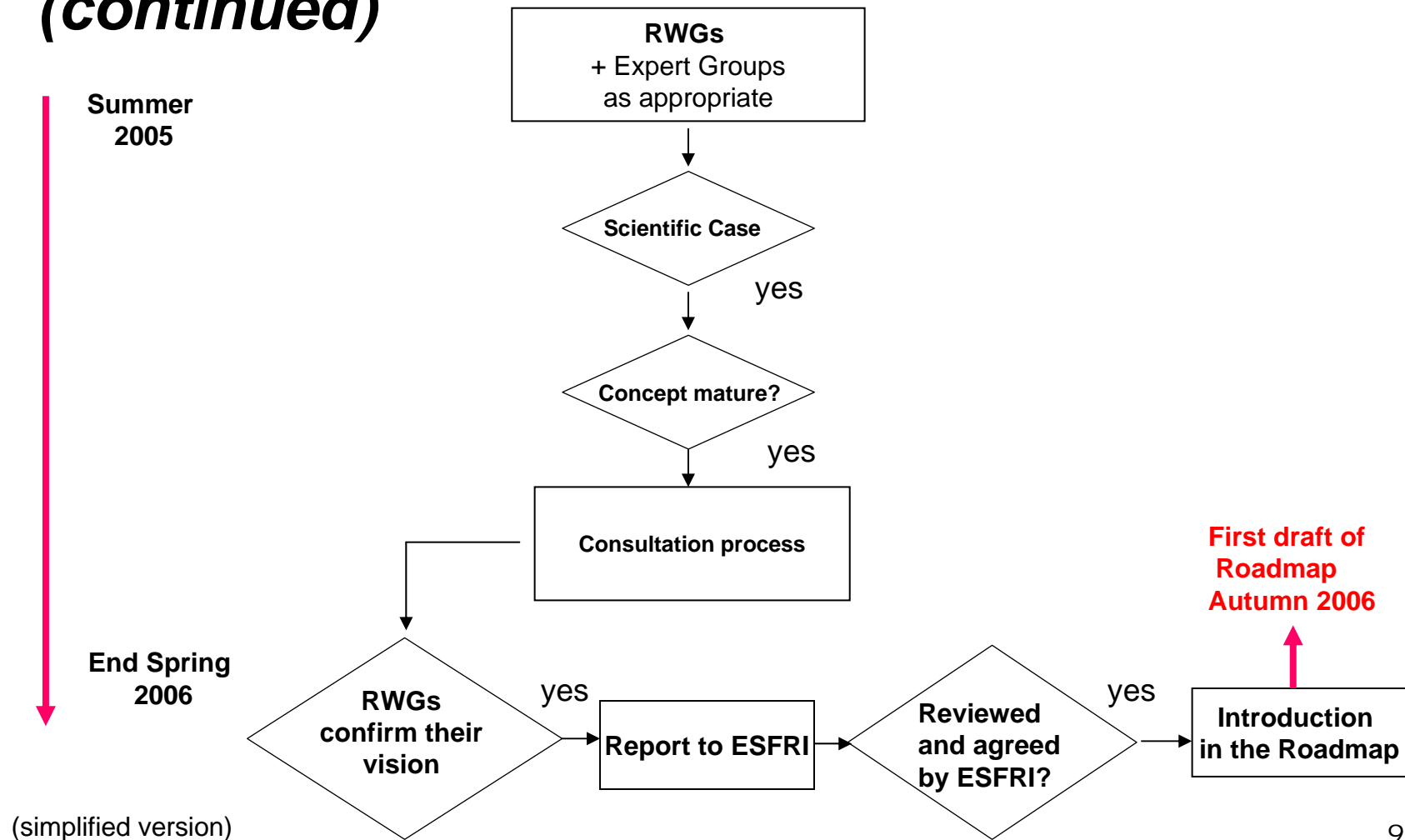
- Proposals will be identified either by national authorities, by the Roadmap Working Groups or Expert Groups.
- Spontaneous proposals have to be sent *to the national delegates of ESFRI* and will be filtered by them.
- All *opportunities* should be identified although different communities are at different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

ESFRI Roadmap Procedure



(simplified version)

ESFRI Roadmap Procedure (continued)



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

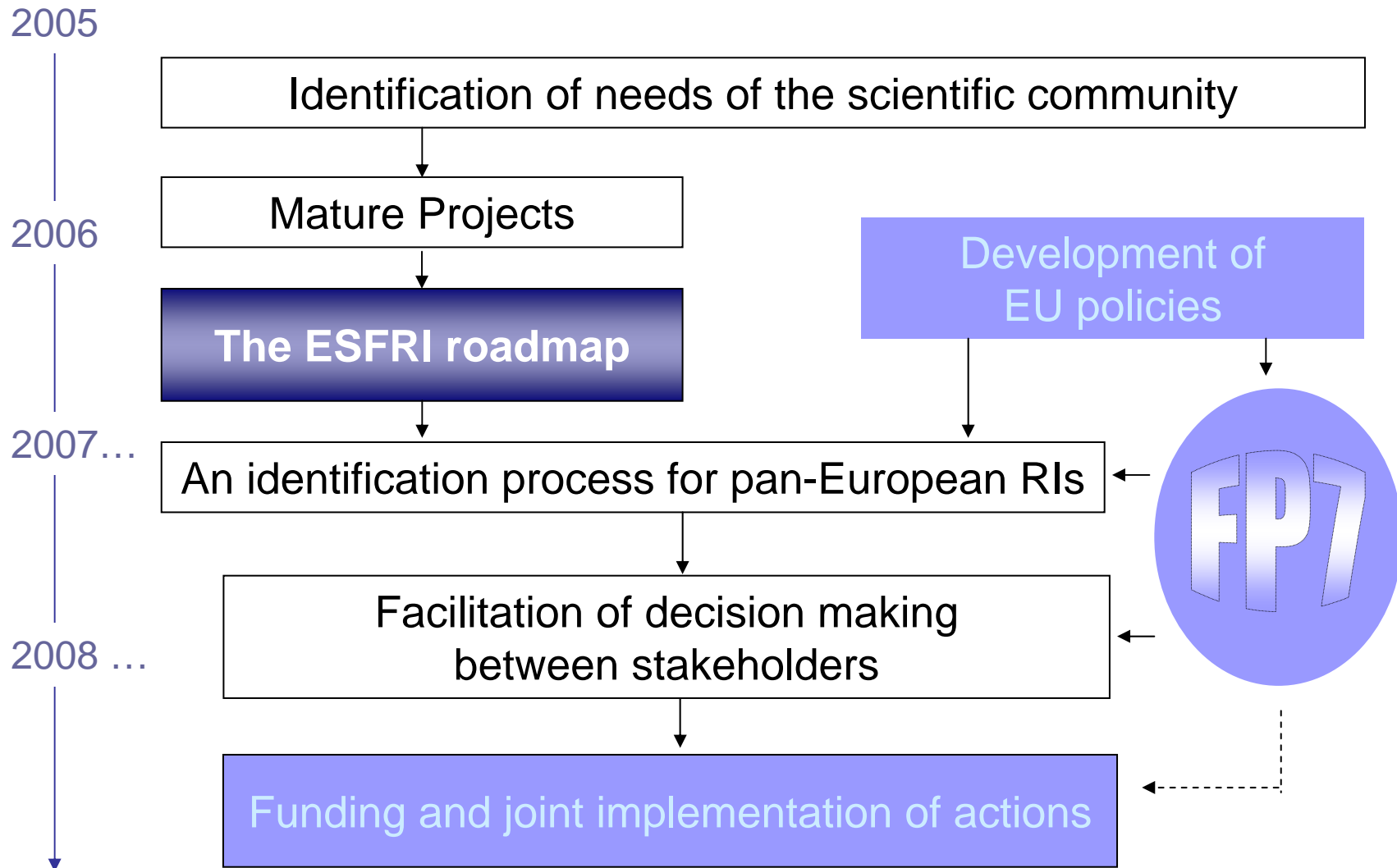
Maturity of Concept:

- 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



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>