Building the Europe of Knowledge

Towards the Seventh Framework Programmes 2007-2013

EC Seventh Framework Programme

- **Proposed duration: 7 years (2007 to 2013)**
- **Budget initially proposed: ~72 billion €**
- **Budget under discussion: ~54.2 billion €**
- **Organised in 4 specific programmes:**

Cooperation (59%)

People (8%)

Ideas (14%)

Capacities (8%)

- **SMEs**
- **Regions of knowledge**
- **Research potential**
- **Science in society**
- **International cooperation**
- **Research Infrastructures**

Collaborative research

9 Thematic Priorities

Health

Food, agriculture and biotechnology

Information and communication technologies

Nanosciences, nanotechnologies, materials and new production technologies

Energy

Environment (including climate change)

Transport (including aeronautics)

Socio-economic sciences and the humanities

Security and space

+ Euratom: Fusion energy research, nuclear fission and radiation protection

9. Security and Space

- Space-based applications at the service of the European Society
- Exploration of space
- RTD for strengthening space foundations

Supporting a European Space Programme focusing on applications such as GMES with benefits for citizens and for the competitiveness of the European space industry.

This will contribute to the development of a European Space Policy, complementing efforts by Member States and by other key players, including the European Space Agency.

Cooperation: 9.2 Space

Instrument: Network of excellence (NoE)

• **Aim:** to strengthen excellence on a particular research topic by integrating the critical mass of resources and expertise needed to provide European leadership and to be a world force on that topic. **Durable integration** of the research capacities and advancing knowledge on the topic.

Number of participants: 10 to 20

• **Joint programme of activities:**

-*Integrating activities:* create a strong and lasting integration among the partticipants in the network.

- Jointly exectuted research: a programme of jointly executed research to support network's goals.

- Activities for spreading excellence (joint programme of training, communication campaign …)

FP7: A NoE for the use of the data

Remark: Long lasting integration mandatory

Capacities – Research Capacity

6 parts

Research Infrastructures
Research for the benefit of SMEs
Regions of Knowledge
Research Potential
Science in Society
Activities of International Cooperation

Integrated Infrastructure Initiatives: Main benefits

- Provision of integrated services to the research communities
- Better exploitation of complementarities between infrastructures and setting up of common standards of operation
- Coherent development of the infrastructures through joint research
- Favour strategic visions for future developments
- Efficient management through harmonised procedures and exchange of good practices

Capacities
Research Infrastructures

Instrument: FP6 Integrated Infrastructure Initiatives

• **Main benefits:** Provision of integrated services to the research communities ; Better exploitation of complementarities between infrastructures and setting up of common standards of operation ; Coherent development of the infrastructures through joint research ; Favour strategic visions for future developments ; Efficient management through harmonised procedures and exchange of good practices

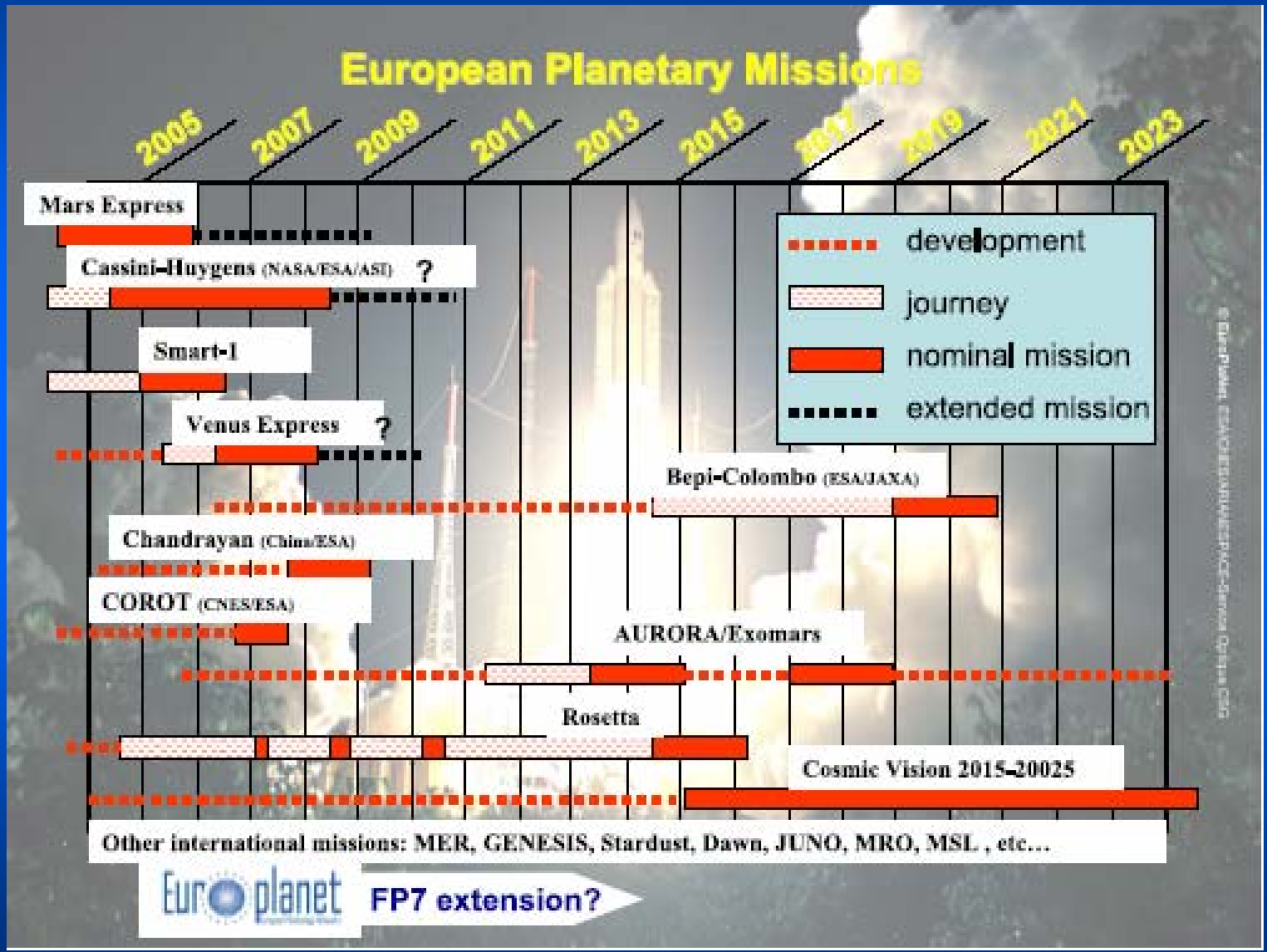
• **Networking activities:** to catalyse the mutal coordination and the pooling of resourcces among consortium, to foster a culture cooperation between them.

• **Transnational access:** to support transnational access to one or more infrastructures among those operated by the participants.

• **Joint research activities:** to support the implementation of one or more joint research projects improving, in quality or in quantity, the service provided by existing infrastructure particular field in Europe. Joint research projects should be widely applicable to the different infrastructures in the given class covered by an I3. Resrahc projects should be innovative and explore fundamental technol and/or techniques underpinning the use of infrastructures in a given class.

Future of EuroPlaNet

- Identify the most appropriate specific programme:
  - Cooperation: to implement a Network of excellence ?
    - Space priority: workprogramme
    - Network of excellence: long-term structuration
  - Capacity: Research infrastructure?
    - Identify the infrastructure
    - transnational access
    - Joint research activities must be based on the use of the infrastructure
- identify the core-partners
    - Average number of contractors in I3s in FP6: 19, quite the same in NoEs


European Planetary Missions
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
Mars Express
Cassini-Huygens (NASA/ESA/ASI) ?
Smart-1
Venus Express ?
Bepi-Colombo (ESA/JAXA)
Chandrayan (Chine/ESA)
COROT (CNES/ESA)
AURORA/Exomars
Rosetta
Cosmic Vision 2015-20025
development
journey
nominal mission
extended mission
Other international missions: MER, GENESIS, Stardust, Dawn, JUNO, MRO, MSL , etc…
Europlanet
FP7 extension?

Some suggestions (1)

- For FP7, identify two main scientific objectives :
  - Science activities in support to the optimal use of data from past and present space missions (using IDIS in particular), involving the broad planetary science community beyond the « space club »,
  - Science activities in support to future planetary missions : Earth-based preparatory observations, laboratory studies, theory and modelling, …
- Examine all relevant places in FP7:
  - « space » priority,
  - Infrastructures,
  - People

Relevance to the Infrastructures instruments

- Networking : basically N5, N6, N2, N3 are mainly networking actions

- Joint research activities: should come out of N2 discipline working groups, and of N3 to define JRA's, in support to data analysis of past/present missions and/or in preparation of future missions.
- It would be good that these JRA's make use of IDIS. This means that there must be some connection between these JRA's and the IDIS science cases.

- Transnational Access: What facilities could we offer to host « guest teams » for research projects ?
  - Laboratory facilities ?
  - Test facilities ?
  - Training centers ?
  - …

Some suggestions (2)

- Need to clarify our participants policy.
- Present base is heterogeneous (esp. Incl. candidates) :
  - ESA
  - National space agencies
  - National research institutes (Academies, CNRS, INAF, MPG…
  - Research laboratories
  - Teams within laboratories ?
  - Individuals ?

- To prepare FP7, strong need to :
  - Define our « perimeter »
  - Define a clear role for each category of participant, and the list of key participants we want to have in each category
  - And identify for each participant what it is really contributing and receiving.

  - To this end, **drawing a « map » of european planetary sciences is essential as a preparatory work to our FP7 proposal.**

The role of N2 in FP7

- N2 wg's should be tasked to identify the major science challenges that can be met using the space missions under the FP7 time frame (both by using data from present and past missions, and by preparing the science base for future missions).

- This should be one additional objective of the Helsinki meeting, and this same objective should also be very clearly and strongly advertised at the Berlin GA.
- Caution: make sure to follow an interdisciplinary approach, not a disciplinary one. This takes a special handling of "discipline" working groups, which the N2 coordinators need to design carefully.