

EuroPlaNet

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N7 IDIS: New Organization

The new organization was approved by EuroPlaNet coordinators on June 14th 2007 during a Coordination Meeting held in Toulouse, France

Four thematic nodes

in charge of scientific activities and implementation of science cases

- Planetary Surfaces and Interiors DLR/IPR, Berlin
- Planetary Atmospheres CNRS/IPSL, Paris
- Planetary Plasmas IWF, Graz & CDPP, Toulouse
- Small Bodies and Dust INAF/IFSI, Frascati

One technical node

FMI, Helsinki

in charge of the coordination and integration of the the technical aspects of the nodal developments

N7 : Initial plan 2007 & 2008

Year 3 (2007)

- | | |
|--|------------------------|
| 1. Specification of requirements for IDIS | <i>In progress</i> |
| 2. Implementation & update of the platform on the base of requirements following N7 reorganization | <i>Restarted @ FMI</i> |
| 3. Cooperation with experts (via meetings and telecoms) | <i>Continuing</i> |
| 4. Additional assessment of needs (if required) | <i>Continuing</i> |

Year 4 (2008)

- | | |
|--|-----------------|
| 1. Recommendations for new services | <i>Expected</i> |
| 2. Update and optimization of the platform on the base of new requirements and recommendations | <i>Expected</i> |
| 3. Final report | |

N7 IDIS : Developments (1)

Implementation of the nodes

- N7 new home page

<http://euromplanet.cesr.fr/n7/>

- Technical Node home page

<http://www.euromplanet-idis.fi/>

Offers links to the thematic nodes

- Planetary Interiors and Surfaces
- Planetary Atmospheres
- Planetary Plasmas
- Small Bodies and Dust

N7 IDIS : Developments (2)

Inventory of resources

- Initial Questionnaire for Resources
 - designed during MGEx-1 (Rome, 2005/09) & sent to EPN members
 - first answers examined during MGEx-2 (Paris, 2005/11)
 - outlined the need to extend/improve the return from the community
- Improving the inventory
 - MGEx-3 (ESAC, Villafranca, 2006/02)
 - reminders sent to EPN members having not answered yet
 - special restrained meeting has been convened at ESTEC, 2006/02
- Activity resumed in 2007
 - the inventory is now available on-line and continuously improving
<http://euromplanet.cesr.fr/n7/res>

N7 IDIS : Developments (3a)

Science Cases

- GEx emphasized from its first meeting the importance of SCases
 - Defining Use Cases is an efficient way to constrain the development of a complex system
 - The aim is to derive the users requirements to IDIS
- Discussion of Science Cases with N2 started 2005/11
- Further developed during several Joint N2-N7 Workshops
 - ESAC, Villafranca, 2006/04: *first proposals & template*
 - FMI, Helsinki, 2006/08
 - EPSC Berlin, 2006/09
 - MPS, Katlenburg, 2007/03 & 05
 - IFSI, Frascati, 2007/10
 - FMI, Helsinki, 2007/10
- Science Cases will be available on-line through the top node

<http://www.europlanet-idis.fi/>

N7 IDIS : Developments (3b)

Main Science Cases

- Planetary Interiors and Surfaces
 - Martian tectonics *Mars Express*
- Planetary Atmospheres
 - Ion chemistry at Titan *Cassini-Huygens*
- Planetary Plasmas
 - S-Wind interaction at Jupiter & Saturn *Cassini-Huygens*
- Small Bodies and Dust
 - Comet Churyumov-Gerasimenko outgassing *Rosetta*
- *Each science case will be documented on-line (in progress)*

N7 IDIS : Developments (4)

Planetary VO sessions

EPSC-1 (Berlin, 2006)

- session MT2 « Virtual Observatories and Databases: Science Cases for IDIS »
- A full day session with 16 invited papers
- Attendance ~ 30 persons

EPSC-2 (Potsdam, 2007)

- session MT3 « Planetary Virtual Observatories: Tools and Science »
- A full day session with 15 invited papers
- Attendance ~ 30 persons

- N7 workshop organized by W. Schmidt (IDIS Technical Manager)

Those sessions related to planetary VO tools and science are really needed by the scientific community as opportunities for such sessions are not so common and we plan to continue.

Projet de réponse à l'AO du 30/11/2007

- Capacities Call 3: FP7-INFRASTRUCTURES-2008-1,
Identifier: FP7-INFRASTRUCTURES-2008-1,
Publication: 30/11/2007,
Budget: 90M€
Deadline: 29/02/2008
- which is published on the page
http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CapacitiesDetailsCallPage&call_id=89
- This site gives everyone access to the documentation.

Aims of the N7 subproposal

- To offer a suitable framework for going on with the FP6 developments
 - *i.e.* to make available to the scientific community an information system able to receive requests on resources in planetology, and able to give pertinent answers at different levels, at least by locating these resources
- This goal implies to pursue developments initiated during the FP6 contract of EuroPlaNet, namely by
 - allowing on-going operation of the node structure
 - ensuring the permanent update of the inventory of resources
 - proposing new services

Needed tools to go on with N7 IDIS

- Networking activity
 - still needed to run the node structure and train the community to information technologies and softwares, especially web services
- JRA
 - for developing data models in various fields of planetology
 - for implementing web services on sites providing resources
 - for developing new databases needed by the community

Outils du 7ème PCRD pour EuroPlaNet

- Networking Activity NA
- Joint Research Activity JRA
- Trans National Access TNA

- Pour IDIS (Integrated and Distributed Information Services) les outils proposés sont 1 NA et 1 JRA ,

- ... mais il est probablement judicieux pour des raisons tactiques et d'équilibre de la proposition EuroPlaNet globale, de changer en 1 JRA incluant le financement des missions, et 1 TNA pour le prototype actuel d'IDIS: ce point est en discussion.

Networking activity

- For running the nodes implemented recently
 - Four thematic nodes (interiors/surfaces, atmospheres, plasmas, small bodies & dust)
 - A technical node coordinating the technical developments
- For training providers of resources to ICTs
 - organizing tutorials on web services and required tools to implement these services
 - This point is mandatory as the community of planetologists is, for the moment being, very poorly involved in VO initiatives, in contrast with the astrophysical community

Possible structure of the IDIS JRA

- 1 WP Management/Coordination
- 1 WP Data Models (IDIS wg)
 - With sub-groups for space observations, ground observations, laboratory experiments ...
- 1 WP Web Services (IDIS Technical node)
 - The purpose of this WP is to disseminate in the community of planetologists the use of information softwares allowing the execution of remote applications in distributed and heterogeneous systems for ensuring interoperability. The astrophysical community is already mastering these communication tools owing to several VO initiatives
- 2 WPs Tools: generic, & specific with added value
 - Simulations, operations on data, visualization ? ...
- 1 WP Development of new databases and technical update of existing databases (LPG and Paris Obs.)