



N2-N7 meeting at MPS, Lindau, May 2-4, 2007

Participants (alphabetical order)

Gérard Chanteur, Odile Dutuit, Geza Erdős, Michel Gangloff, Christopher Harvey, Christian Jacquy, Ralf Jaumann, Norbert Krupp, Etienne Pallier, Pascal Pernot, Thomas Roatsch, Pedro Russo, Walter Schmidt, Florian Topf.

1 Introduction

1.1 New organization of N7

The new organization of N7 activity was approved by the EuroPlaNet Coordinators at their meeting of March 23, 2007 (see the minutes of that meeting on the web server for details, and the presentation made by GC during the EuroPlaNet GA held last February at ESTEC). EuroPlaNet Coordinators agreed to propose the Institute of Planetary Research of DLR in Berlin to be the Node Leading Institute for Surfaces/Interiors and IWF in Graz to be the Node Leading Institute for Plasmas.

1.2 Review of actions decided during meeting held at MPS, Lindau, March 5-6, 2007

See the minutes of this preceding meeting for details and references.

Action 1 Done

Pascal Pernot, LCP Paris-Sud Orsay, N5 co-coordinator, is the scientist in charge of science case 1 "Ion and Neutral Chemistry at Titan"

Action 2 **Postponed due to GC's limited availability due to health problems
Decision expected end of May**

Action 3 Cancelled. Information has been distributed by e-mail

Actions 4 to 9 Done

Action 10 Site almost ready, will be publicly available on May 16th

Action 11 **Pending, completion expected May 16th**

Action 12 **Pending, completion expected May 16th**

Actions 13-14 Done

2. N7 Implementation of the new organization

1. It is mandatory to select the two remaining nodes, i.e. Atmospheres (IPSL, Paris Observatory or FMI) and Small Bodies. For the latter one we have a positive answer from A. Coradini, head of INAF Frascati, but G.Ch. has to clarify that beside the preparation of FP7, there are tasks for FP6 to be done within the remaining 18 months of the contract.

Action 1 GC Decision concerning the node “Planetary Atmospheres”

Action 2 GC Decision concerning the node “Small bodies”

2. Technical Management/ Top Node : mail to IDIS experts and EPN Coordinators saying that we have a good candidate for this task (join FMI proposal to the mail), and ask whether a better proposal could be found: letter of intent as soon as possible, and formal proposal before May 21st.

Action 3 GC mails to IDIS experts and EPN coordinators

3. Edit a document summarizing the new organization, indicating the Node Leading Institutes and Top Node for Technical Management, and specifying the tasks of the top and thematic nodes.

Action 4 GC

4. Concerning the node “Planetary Surfaces and Interiors”, a subcontract between CNRS and DLR Berlin, the selected Node Leading Institute, is necessary (because DLR is an associate member of EuroPlaNet) and should be finalized as soon as possible to allow the transfer of 40kEuros in order to start the activity of the node.

Action 5 M. Blanc and N1 Management together with CNRS DR14

5. It is mandatory to retrieve more money from ASI which does not play a sufficient role to justify the currently accepted budget of 65kEuros for the whole duration of the EPN contract : about 40kEuros should be given back by ASI or should be transferred to INAF by subcontract if INAF is confirmed as Node Leading Institute.

Action 6 M. Blanc and N1 Management

All preceding actions should be completed by end of May.

6. Next meeting ? Having regard to the present schedule of N7 it seems unreasonable to organize a meeting in June at IWF Graz.

7. The N7 Splinter Meeting during EPSC-2 in Potsdam could be used to discuss the first draft of the Preliminary Users Document ?

Action 7 GC Mail asking IDIS Experts and Node participants who will attend the EPSC-2

8. Target the first half of September for the next meeting that could be organized at/by DLR Berlin: could be a joint N2-N7 meeting, at least partially

Action 8 GC Ask people’s availability during first half of September

9. The following meeting could take place current November, possibly in conjunction with the N3 Meeting on Auroras at UCL ?

Action 9 GC Investigate this possibility with Steve Miller and Helmut Rucker.

10. Define, with the Technical Manager and IDIS Experts, WPs for the Node Leading Institutes.

Action GC, Technical Manager and IDIS Experts

11. Pending problem of the co-coordinator for N7 should be solved: Enrico Flamini’s involvement and availability for N7 is much too limited.

3. Organization of the N7 thematic nodes

1. This meeting was intended to be the first Node Coordination Meeting. However, two Node Leading Institutes and the Technical Management of IDIS have not yet been identified. It would nevertheless have been possible to discuss the organization of the "Plasma" and "Surfaces/Interiors" nodes but the very limited attendance to this meeting, despite an early announcement on March 15th, prevented such a discussion.

2. The "Suggested tasks of each Node Leading Institute are outlined in the document "EuroPlaNet_Strategic-Workshop_ESTEC_2007-02_N7-2007-prospect_.ppt" distributed to the N7 Experts and EPN coordinators on February 27th 2007:

- Coordinate the thematic field and participate to the N7 WGs
- Update the inventory of resources in the relevant field
- Prepare user requirements from selected science cases appropriate to the thematic field
- Provide thematic contributions to N7, and participate to "Node Coordination Meetings"

3. The DLR Institute of Planetary Research, Berlin, is the selected Node Leading Institute for Surfaces/Interiors. Its activities have been presented by Ralf Jaumann (see his presentation). Prospects for organizing this node have been addressed, but the effective start of the node activity depends upon the signature of a subcontract with CNRS.

DLR/IPR has provided High Resolution Stereo Camera onboard Mars Express, and is involved with hardware on Cassini, Rosetta, VEX, Dawn (NASA), ExoMars (ESA), Bepi Colombo, Moon (which is a DLR mission). DLR/IPR has a deep interest in FP7, for which they want to build a database of all planetary features. They need a tool to mine the existing enormous amount of data, to identify features in the numerical data to help study in comparative evolution of various solid bodies of solar system.

As a start DLR/IPR will work on FP6 for a user requirements document. Existing data such as that from Mars or Titan, which are already available will be used. Access to data is already provided by Regional Planetary Image Facilities (RPIFs) and the PDS. At present PDS and PSA give all the technical information about the observations, and also some indication derived by hand examination of the data. Clearly adequate metadata for what Jaumann wants to do can only be provided by systematic data mining, which cannot be done in FP6.

FP6 must demonstrate the power of combining data, using publicly available data.

The workload for this study cannot be entirely supported by DLR. The planetary surfaces node cannot be responsible for the entire scientific case, the scientists proposing the science cases must be the driving force (i.e., do some of the work). For this use case, help is expected from Mike Toplis, coordinator of Discipline Working Group 8 on planetary interiors and composition, Athena Coustenis, and Olivier Grasset who proposed science cases in this field. NB This remark is quite general and concerns all the science cases, for which N2 DWGs have already provided input and are still expected to do.

DLR planetary node will contact Athena Coustenis and Mike Toplis for help, and will get some support from activity N7.

4. The implementation of the Plasma node should have been discussed: two representatives of CDPD attended the meeting for this purpose. Unfortunately no equivalent representation was sent by IWF Graz, the already selected Node Leading Institute.

Florian Topf, from IWF Graz, is now financed by EuroPlaNet to work until the end of 2008 under the supervision of Helmut Rucker.

5. The thematic Node "Small bodies" should integrate the database on Cometary Chemistry designed by Heike Rauer at DLR/IPR, Berlin (provides production rates of various gases). See that in the framework of the organization of this node.

6. It seems urgent to emphasize the importance of a good implementation of the nodes: the task should not be underestimated by the selected Node Leading Institutes. Because the summer schedule is already heavy for most of us, the organizational work will be done mainly through e-mail exchanges: in case of strict necessity a few restrained meetings can be organized.

4. IDIS Technical Management

1. Walter Schmidt presented the offer made by FMI Helsinki to host the Technical Management of IDIS (see his presentation on the server). The proposal comes in two parts:

- Overall technical management and the top-level N7 node.
- Thematic node for atmospheres : it would be useful for development and testing purposes, but not essential, for one thematic node to be co-located with the top-level EuroPlaNet site.

2. The overall technical management concerns:

1) Management functions

- completion of the inventory of resources
- derive user requirements from science cases
- implementation of the N7 Top Node

2) Coordination activities

- establish information exchange tools
- define preliminary design rules for thematic node interoperability
- coordinate and integrate node-related user requirements
- coordinate development of node-related design specifications

3. The EPN coordinators will meet in Toulouse on June 12-13 ; but this is too late for a decision on the technical management. Whoever takes matters in hand will have to act quickly in order to have something operational by the time of the FP7 proposal in February 2008. But rapid coordination is difficult in July and August, respectively the holiday periods of northern and southern Europe.

For reasons of practical expediency it was considered undesirable for the top node be anywhere other than in the institute of the technical manager.

4. Work package descriptions (including interface and implementation guidelines) should be prepared for the node leading institutes; these can then be tested during, implementation of the first of the thematic nodes.

5. One of the first question for the Technical Mangement and N7 Coordinators will be the integration of the work already performed by Etienne Pallier on the web server of resources.

5. Inventory of resources: technical progress report on the web server

See the presentation made by Etienne Pallier who has designed a web server for resources since the last March meeting.

1. Associate members of EuroPlaNet should be enumerated by order in which they were accepted as associate members.

2. Check resources types, to see if anything should be added to the present list

3. Put a date on each page of the resource form, the date at which it was last validated.

4. Documentary references can be identified by a DOI Digital Object Identifier when available.

5. There is an urgent need to create a metadata working group to create a list of keywords for resources; this group will validate the proposed keywords.

If a hierarchical keywords structure is used, pull-down lists of sub-lists should be proposed at each level.

6. Each thematic node will be responsible for the maintenance of the inventory of resources in its own field: thematic contributions will be integrated in a unique inventory under the supervision of the IDIS Technical Manager. Special consideration should be given to resources linked to more than one thematic node.

6. Science Cases

1. Two detailed presentations of the work done since the March meeting at MPS: see the presentations on the server.

1. Pascal Pernot (LCP Orsay, France), presented work done since the March meeting on SC "Ion and Neutral Chemistry at Titan"

Includes a list of resources

Mentions the difficulty to access Cassini data, especially INMS mass spectra, even those already published: a major problem for contributors being not Co-Is, for example theoreticians or modellers even if the relevancy of their contribution is recognized.

Simplified access to GAPHYOR already done: a valuable tool !

2. Florian Topf (IWF Graz, Austria), presented work done on SC "Solar Wind at Jupiter and Saturn, and Auroras"

Mainly a list of available resources, nevertheless to be completed especially with references to MAPS KP Database and CDPP in Toulouse, and to web services provided by IMCCE at Paris Observatory

2. C. Jacquey, Director of CDPP, mentioned that one SC is not enough to derive a comprehensive list of requirements for a planetary VO, and presented the proposal made by CDPP-CESR for the plasma node (see the presentation).

Idem for Surfaces/Interiors, the Node Leading Institute (DLR/IPR, Berlin) will reconsider the Science Cases to be addressed in connection with Mike Toplis, Olivier Grasset and Athéna Coustenis.

7. Outreach

Is it worth creating a fifth N7 node for Outreach ? The current opinion is no, a dedicated interface between N7 Technical Management/TopNode and N4 should be the right way to take care of integrating outreach products into IDIS: the selection of outreach products to be integrated is the task of the N4 Outreach Selection Committee. An updated presentation concerning outreach products has been made by Pedro Russo (see his presentation)

8. Web sites

There are several, at least two, EuroPlaNet web sites: EPN coordinators have to decide which one is the official one: <http://europlanet.cesr.fr/> & <http://www.europlanet-eu.org/>
Normally the main web site should be <http://europlanet.cesr.fr/>, the other one being the outreach site and should appear as such. Each EPN activity web site should provide a return to the Main EuroPlaNet Home Page (the official site).

Recommendation to Jean-Pierre Lebreton and Michel Blanc to clarify the situation.

9. Mini Google

Seems worth buying it for the remaining part of the contract for further evaluation by the whole EPN community. The adequate "size" of the machine is to be determined. Could IDIS experts help on this matter ?

10. Annexes :

10.1 Agenda of the meeting

May 2nd

14h30 Brief report on status of N7 activity and purpose of the meeting (G. Chanteur)

15h00 Web server of EuroPlaNet resources (E. Pallier) and discussion

16h40 Break

17h00 Discussion on Mini Google and on line demonstration

18h00 Adjourn

May 3rd

09:00 Brief reminder on Science Cases (G. Chanteur)
09:30 Presentation of DLR/IPR activities and plans for FP6 and FP7 (R. Jaumann)
10:30 Presentation of FMI offer for Technical Management (W. Schmidt)
11:00 Science Case "Ion and Neutral Chemistry at Titan" (P. Pernot) and discussion
12h30 Lunch break
13h30 Resuming discussion on Technical Management
14h00 Science Case "Solar Wind at Jupiter and Saturn: Auroras" and discussion (F. Topf)
15h00 Integrating Outreach products in IDIS (P. Russo)
16h00 Adjourn

May 4th

09:30 Organizing the Plasma Node: suggestions from CDP, & discussion (C. Jacquy)
10h30 Break
11h00 Presentation of SPASE (M. Gangloff) and discussion
12h30 Lunch break
13h30 Conclusions, list of actions, preliminary draft of the minutes
15h00 Adjourn

[10.2 Presentations \(available on the N2 web server\)](#)

Etienne Pallier, "The EuroPlaNet IDIS inventory system"
Ralf Jaumann & T. Roatsch, "Database for Comparative Investigation of Geodynamic Processes in the Solar System"
Pascal Pernot, "Science Case 1: Titan Ion Chemistry"
Florian Tpf, "Science Case 4: Solar wind at Jupiter and Saturn: Auroras"
Pedro Russo, "Outreach products integrated under EuroPlaNet IDIS"
Walter Schmidt, "IDIS Technical Management proposal"
Christian Jacquy, "The CDP-CESR proposal for the plasma node of EuroPlaNet"
Michel Gangloff, "SPASE"

[11. Summary of actions](#)

ID	Action	Ready by	Responsible
0705-01	Decision concerning the node "Atmospheres"	31/05	N7 coordinators
0705-02	Decision concerning the node "Small bodies"	31/05	N7 coordinators
0705-03	Inform EPN Coordinators and N7 IDIS Experts About FMI proposition for Technical Management, and call for other proposals	ASAP	N7 coordinators
0705-04	Decision concerning the Technical Management of IDIS	31/05	N7 coordinators
0705-05	Edit a document summarizing the new organization of N7, indicating the Node Leading Institutes and Top Node/Technical Management	10/06	N7 coordinators
0705-06	Subcontract from CNRS/DR14 to DLR/RPI Berlin as Node Leading Institute	ASAP	M. Blanc & N1

0705-07	Readjust ASI funding to services provided, could be by subcontracting INAF as Node Leading Institute	070331	M. Blanc & N1
0705-08	Information & decision concerning the N7 splinter session during the EPSC-2	16/05	G. Chanteur
0705-09	Fix dates and location of the third N2-N7 meeting of 2007 (DLR/RPI volunteers)	31/05	N2 & N7 coord.
0705-10	Investigate the possibility to organize the fourth N7 meeting of 2007 next November in conjunction with the N3 "Aurora" meeting at UCL	31/05	N2, N3 & N7 coordinators
0705-11	Definition of Work Packages for the Node Leading Institutes	30/06	N7 coordinators, Technical Manager & N7 experts
0705-12	Decision concerning the pending problem of the co-coordination of N7	30/06	EPN coordinators

12 Acknowledgements

We express our warm thanks to MPS for having hosted this meeting and to Norbert Krupp who organized it.