

EuroPlaNet N2-N7 Meeting in Lindau
March 5-6, 2007

Participants:

R. Bentley, G. Chanteur, O. Dutuit, B. Grieger, A.-M. Harri, C. Harvey, N. Krupp, E. Pallier, P. Russo, F. Topf

Monday March 5th

1. Status of N7

G. Chanteur commented his presentation to the ESTEC General Assembly on February 27th (forwarded to EPN coordinators and N7 experts on February 27th). Formal approval of the suggested reorganization of N7 would be required first by N7 experts and then by EPN coordinators. The presentation triggered much discussion.

2. Discussion about the role of ASI in N7

- ASI agreed last January with the reduction of its EuroPlaNet dotation, nevertheless the budget remaining to ASI (65k€ for the whole duration of EPN contract) should be justified by a service to the community. Consideration should be given to recovering any funds from ASI that exceed the accepted justified costs.

- The N7 activity must have two coordinators who attend the N7 meetings or at least send a knowledgeable representative.

3. Tasks of N7 for 2007 (as in the presentation "**Status of Activity N7 – IDIS and Prospects**" to the EuroPlaNet General Assembly of 2007/02/27)

Task 1: Inventory of resources available to European planetary scientists. The information collected last year from the answers to the questionnaire should be made available on the web. This information will be converted into a table of metadata that will be accessed by a web tool designed to display these resources. When this will be completed for EPN members it could be extended to associates.

Task 2: IDIS Preliminary User Requirements. Use the Science Cases to draft an IDIS user requirements specification Try to get a **draft for June 2007 to be discussed at EPSC-2 in August**. Final delivery planned for end of 2007.

Task3: Activate N7 working groups and nodes coordination meetings

WG1: Theory and modelling, Lab work, Space and Earth based observations (**further elaboration is needed there**)

WG2: Databases, existing and currently planned or in development

WG3: Science cases and user requirements

Because of the lateness of N7, we propose to suspend the structure of the working groups and conduct workshops that will focus on the task of gathering the required information as quickly as possible. We hope that, if key personnel attend, many issues can be solved during the workshops and significant progress can then be made.

The following plan is proposed for resuming N7 activity and coordinating it with other EPN activities:

- next workshop at MPS Katlenburg, from **May 2nd 15:00 to May 4th 15:00, 2007.**

Objectives:

- a. Discuss the web-based inventory of known resources, and its shortcomings (Action 0703-07 is assumed to have been completed on time, so that participants will have had time to examine the web-site beforehand).
 - b. Present the progress made on Science Use Cases 1 and 2
 - c. List the User Requirements already identified during preparation of these use cases.
- subsequent workshop could be organized at IWF, Graz, on May 30-31 or preferably **June 4-6, 2007 (to be checked with H. Rucker).**
- a third workshop should be organized during next autumn: location TBD

4. Presentation from Björn Grieger

(for details see [B. Grieger's document sent to N2 and N7 members and the Experts' Group prior to the meeting](#))

Main goals are to develop:

- a demonstrator
- a sound basis for further development within FP7

The scope must be limited to the information and data available at the host institutions of the participants: we need to associate the participants into the IDIS design process

The information is there; the IDIS demonstrator builds on the web sites of the participants.

- Hypertext link creation as IDIS task: the IDIS demonstrator provides a system which automatically creates links between related documents
- For each IDIS resource hosted by a participant, the participant provides meta data
- For the FP6 demonstrator, a resource is just a displayable web document; in the FP7 generalisation, a resource can be anything accessible on the www
- Metadata base describing the available resources is to be built
- Access to external data:
 - A participant may provide metadata for a website hosted somewhere else
 - A participant may provide customized access to PDS or PSA data

For FP6, the only action would be “display a website document”

For FP7, more sophisticated actions, as “run a remote model” or “virtual

observatory action”

Where possible, existing tools should be used to extend the capabilities of IDIS – there was some discussion whether Google might be used to augment the search capabilities.

Note received from Bob Bentley on March 8th:

Regarding Google: there appears to be a product called Google Mini that may do the sort of thing we need, but it costs (3000 euro?):

<http://www.google.co.uk/intl/en/enterprise/mini/>

The description in the features sound good - the FAQ is also worth looking at. One thing it can do is automatically build a site map that can be submitted to Google Webmaster Tools so that Google can discover and crawl the public website's content. It deserves consideration, but the people developing IDIS should decide. It maybe that if the documents can be gather in some way the Goggle would find them anyway – Mini however sounds much more directed.

5. Presentation of outreach products by Pedro Russo (N4)

IDIS should integrate links to outreach products made available by activity N4. It should be compatible with Virtual Observatories and make use of available standards, especially metadata standards for images intended for outreach. An interesting freeware initiative named *FITS Liberator* exists for astronomical images that allows end users to play with real data from telescopes. The *FITS Liberator* team intends to extend this initiative to PDS data.

See http://www.spacetelescope.org/projects/fits_liberator/index.html

6. Guidelines for action

- The objective of the proposed actions is to make sufficient progress in developing the IDIS in order to ensure that we will have a representative system in place before the submission of a proposal for EPN under FP7 (probably in May 2008).

- Prepare an agenda for the N7 meeting from May 2 (15:00-18:00) until May 4, 2007 15:00 in MPS, Katlenburg-Lindau.

- Prepare with the N7 Technical Manager to be recruited and with N7 experts a management plan, for example a PERT (Program Evaluation Review Technique) chart showing the principal milestones necessary to obtain something working before the submission of the EPN proposal to FP7.

- Develop science cases 1 and 4 (Ion-neutral chemistry at Titan and Solar wind at Jupiter and auroras), looking at the different aspects (scientific, but also the involved teams, the node institute, etc.), with which we will start

- Breadboard implementation of the plan proposed by Björn Grieger: a simple metadata base will be created starting with the information gathered last year

during the inquiry of available resources, then a web form will be designed allowing each EPN member to check the information we have concerning its activities and resources, and possibly correct or improve it. This action will be started by E. Pallier and G. Chanteur.

Tuesday, March 6, 2007

1. Science case 1: Titan Ion Chemistry (O. Dutuit), contact person tbd

- a. Short description of the science case (link to Berlin presentations)
- b. Links to PDS (Planetary Data System) for Cassini data for INMS and CAPS
- c. URL of the databases (GAPHYOR, link to the Tucson webpage with Anicich's "database" plus list of Roger Yelle's model, links to UMIST and Eric Herbst) with the following information:
 - A short description of what is in the data base
 - a short user manual to use it (to be put on our webpage)
- d. (Plus a link to our review paper)
- e. Plus names of laboratories in EuroPlaNet or contact persons with their expertise?
- f. Links to the relevant papers (to the journals with "doi" links with the abstract free)
- g. Tool for converting cross sections into rate constants

Something should be prepared for the next meeting in May to serve as an example and give ideas to help develop the other use cases. It was suggested that E. Pallier could take care of this, but the metadata base and web server for resources are his first priority. G. Chanteur will search for volunteers.

2. Science case 4: Solar wind with Jupiter (and Saturn) and aurorae (N. Krupp and F. Topf)

- a. Short description of the science case (link to Berlin presentations and Villafranca meeting)
- b. Observations/measurements of relevant solar wind data close to Jupiter
 - i. Links to PDS (Planetary Data System) for Cassini, Galileo, Ulysses, ... data and other data bases for ground-based and Earth-orbit based observations of Jupiter's aurora (Hubble,
 - ii. names of institutes/laboratories in EuroPlaNet or contact persons with their expertise for this science case?
 1. MPS (Cassini MIMI, UVIS; Galileo EPD; ULYSSES EPAC, SWICS)
 2. Imperial College (Cassini MAG, Galileo MAG, Ulysses MAG)
 3. MSSL (Cassini CAPS,...)
 4. IWF Graz (Cassini RPWS, Galileo, ...)
 5.
- c. Links to the relevant papers (to the journals with "doi" links with the

- abstract free) with keywords and short descriptions of what is in the paper, what data was used, which models,...)
- d. Relevant data bases for reactions in Jupiter's aurora (link to science case 1 GAPHYOR?)
- e. Catalogue of Solar events and their location on the Sun which could trigger enhancements/changes in Jupiter's aurora. Link to http://sec.ts.astro.it/sec_ui and <http://www.egso.org/> ...
- f. map of S/C locations in the solar system (access to SPICE software)
- g. comparison with "space weather" at Earth including all relevant data

Look at the MPS website for what they have done for publications with the possibility of getting all publications and presentations linked to EuroPlaNet.

3. Building the metadata base (E. Pallier)

Inputs needed from the users to describe an available resource

Possible input for the metadata base:

- 1) Once for all, registration needed from the users
 - same unique registration for everybody or individual registration?
 - We get automatically the contributor name, email, affiliation, contribution activity, experience that can be offered (Earth based, space based, modelling and simulation, laboratory experiments)
- 2) For each resource submitted, provide:
 - Format type (webpage, doc, data file, data base)
 - Experience(s) type (Earth based, space based, modelling and simulation, laboratory experiments): multiple selection
 - URL
 - Related Science case(s) (optional): multiple selection possible
 - Location (institute)
 - Person in charge (by default contributor): selection from a list (for the institute)
 - Description (optional)
 - How to access and use it (optional, only if needed) or link to a user manual (doc or webpage)
 - Scientific meta tags (keywords) list (to do: define a list): PAC codes?
 - Special (new) keywords
 - Associated resources (optional)

4. Budget for manpower and N7 technical management

- It is mandatory to clarify who does what before taking decisions concerning the sharing of this budget.

- A technical manager is needed by N7 to supervise the developments made

Ari-Matti Harri relays a mail from W. Schmidt who proposes FMI as a node leading institute for modelling data (planetary plasma environments in a first step, with extension to atmospheric modelling in a second step). A-M Harri suggests that FMI could also propose a technical manager for N7: he will rephrase the proposal for the

end of the week. Comment: the scope of a node is larger than just modelling, it should address all aspects of the thematic field.

- A teleconference should be organized during the next two weeks for the N7 experts to decide about the technical management and the suggested new organization of N7

5. Next N2-N7 meeting in May

Location : MPS Lindau

Provisional dates: May 2 (15:00) – 4 (15:00) + EPN coordinators meeting on May 4 afternoon + N7 experts meetings (evening May 2nd or midday 3rd ?) and debriefing with coordinators on May 4th 16:00-18:00 ?)

Participants would be N7 experts, EPN coordinators, N2 DWGs leaders, science cases scientists (limited to the five SCs selected during EPSC-1)

6. ACTION ITEMS

ID	Action	Ready by	Responsible
0703-01	Find volunteers to help develop science use case 1 (contact Nathalie Carrasco on the PI side, somebody else from EuroPlaNet)	ASAP	Chanteur Dutuit
0703-02	Appointing a Technical Manager for N7	ASAP	EPN coordinators & N7 experts
0703-03	Organise a teleconference of N7 experts some time around March 20, circulate beforehand the agenda and documents to be discussed.	070316	Chanteur
0703-04	Announcement of next meeting at MPS in May	070316	Krupp Chanteur
0703-05	Prepare the registration process of users allowed to access the metadata base	070316	Chanteur Pallier
0703-06	Specify the format in which information on known resources is to be submitted for insertion in the web page(s)	070316	Pallier Chanteur
0703-07	Extract information from the existing resources pages and format it as per 0703-06	070331	Chanteur Harvey
0703-08	Design a web-site to display the known resource information	070331	Pallier
0703-09	Propose an agenda for the N7 meeting in May 3-4, 2007 at Lindau MPS	070331	N7 Coord. & Krupp
0703-10	Open the web site of EuroPlaNet Resources	070415	Pallier
0703-11	Inform EPN contacts that this information is on the Web, to be checked and completed as required	070416	Chanteur
0703-12	Prepare a PERT chart showing the dates and relations between the principal milestones necessary to have something working before the submission of the EPN proposal to FP7	070431	N7 Coord. & Technical Manager & N7 Experts
0703-13	Work on science use case 1 with the aim of presenting it at the next MPS Lindau meeting	070502	TBD
0703-14	Work on science use case 4 with the aim of presenting it at the next MPS Lindau meeting	070502	Krupp Topf