SWWT meeting #14, ESTEC, 3-5/11/2003

Contacts & informations from the European Commission

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Note :

These contacts and collection of information near the European Commission representatives are an action (AI 6) from SWWT 13 (ESTEC, 30/06/2003).

They take opportunity of many events such as meetings in Paris, Brussels.

They consider someone of the many papers issued from all partners in European affairs, including the National representatives and relays inside FP6.

Some information copied here are already obsolete. Their synthesis and comments may reflect either official positions or the author's personal understanding.

EC contacts and events

Galileo info day, Brussels, 4/09/2003

Global change (analysis of French participations), Paris, 8/9/2003

PROSPACE (space strategy & European industry), Paris, 19/09/2003

SWWT-RTD H4 meeting, Brussels, 22/09/2003

Presentation of INSPIRE initiative, Paris, 25/09/2003

Report on GMES steering committee, Paris, 8/10/2003

Miscellaneous informations & documents

FP6, Aeronautics & space, updated Work programme (19/09/2003) :
- GMES, risk management
- GMES, INSPIRE

Green – white paper : ESF document

IST evaluator report: 21 things to do before submitting a proposal

GMES events:
- initial period report (2001-2003)
- GEO meeting, Baveno, 28-29/11/2003
- Evolution towards "joint undertaking"

Galileo Infoday, Brussels 4/09/2003 :

Personal feeling

- there is a very limited opportunity to introduce space physics in this first call; the most adequate scientific contribution could apply to digital processing, software algorithms, definition of standards.

- the only practical entry point for science is to bring some support to an existing industrial or commercial consortium, preferably for 2d or 3d call.

- it is obviously too late to prepare any relevant proposal to 1st call before mid-October, unless anticipated for a long time !

Short info :

The "First call" was issued on 31/07/2003, with a closing date 14/10/2003. It is under responsibility and management of the brand new Galileo Joint Undertaking (GJU), with a funding of 20 Meuros.

It refers to the FP6, Priority 1.4, however it has specific rules and applicable documents. Expected proposals look like "Integrated Projects".

The "First call" is split in 5 Activities, sharing the 20 MEuros, for about 24 month contracts.

Activity A: User Receiver Preliminary Development
Activity B : Galileo Local Component Development
Activity C : Introduction of Galileo Services Using Egnos
Activity D : Application Market Development
Activity E : Mission Implementation

Four of them (A, B, D, E) will be contracted to single contractors and funded 100%; the last one (C) is to a limited number of contractors, co-funded 50%.

A coordination is wished with ESA Pilot Projects and National initiatives. There is a strong indication towards SMEs and also towards Research institutes.

Some key-words are : IPR., Signal in Space, signal integrity, core technology, differentiator, prototyping, development plan, demonstration, training, certification, market, concession.
The full content of given presentations should be soon available on GJU website.

The second call is announced to be issued by end 2003, and the third call is under preparation, whenever the first one is not yet evaluated.

Brief minutes of meeting between
EC/DG.RTD/H3 unit, Aeronautics and research coordination in the area of space and ESA Space weather working team

Purpose of the meeting :

Presentation and exchange of information about the European Space Weather community, the involvement of EU in that thematic, the way proposals in FP6 can be received in Aeronautics and Space.

Date : Monday 22/09/2003, 14h30

Participants :

- DGRTD, H3 Aeronautics and research coordination in the area of space :
  Herbert Von Bose (Head of unit), Nisso Gargir, Peter Breger (GMES coordination issues).
- SWWT ESA Space weather working team, board representatives :

François Lefeuvre (chairman, LPCE, Orléans, Fr), Risto Pirjola (FMI, Helsinki, Fi), Alexi Glover (ESTEC), Alain Hilgers (ESTEC), Paul Gille (LPCE, Orléans, Fr).

- ESA-HQ : Clovis De Matos (Advanced concepts & studies office)

Updated agenda

(1) Recall of previous meeting (8/10/2002) on eligibility of space weather proposals in FP6 .

(2) Review of user requirements in Aeronautics & space

(3) Examination of the present status of the ESA Space Weather Application Pilot Project and Road map

(4) The SWEET proposal to First call

(5) Examination of the situation linked with the Calls on GMES risks :

- is there a common problem which explained why no proposal has been retained (quality of the proposals? misunderstanding from the consortia? inadequate tools? too weak involvement of SMEs? etc.)
- are drastic changes forecasted for the new Call (new orientations? different distribution in the applicable tools? etc.).

(6) Possible recommendations which may be given after a first run, to potential applicants FP6 (2d, 3d call) : partner distribution for each instrument, size and level of the consortia, level of EC funding, etc.

Recall

At the end of the nineties, ESA decided to initiate a feasibility study of a Space Weather programme which has been performed independently by two consortia. A Space Weather Working Team (SWWT) was nominated by ESA to follow the development of the studies. Following this first phase, a pilot project of coordinated space weather services has been initiated in April 2003 to investigate more quantitatively the benefits of such an approach.

The SWWT acts now as a forum where the best ways of developing Space Weather activities are discussed. It is presently chaired by Dr F. Lefeuvre (Laboratoire de Physique et Chimie de l'Environnement, CNRS, France) and co-chaired by Dr. R. Pirjola (Finnish Meteorological Institute, Finland) and Pr. W. Riedler (Institute of Experimental Space, Austria). The ESA responsible people are Dr A. Glover, Dr A. Hilgers and Dr C. de Matos. An important concern of the SWWT is to identify the future source of funding and host organisation for the future development of a coordinated space weather activity. One line of investigation is through the EU FP6.

In October 2002, before the FP6 launch, a first meeting between EU representatives and SWWT members was held about the eligibility of space weather proposals in FP6. The purpose was to gauge how best to proceed for submissions in response to future calls. This meeting was considered as an interesting exchange of views between the EU Space policy unit H4 and representatives of other thematics (Global change, IST, radiations).

Since the term "space weather effects" was present in the Work programme for Aeronautics & space first call, inside "GMES risk management", several projects were introduced including SWEET (Space Weather: Elaboration of European Tools).The evaluation report showed that space weather with its risk aspects is considered a relevant subject. However no one proposal was retained in this field and it is announced that the corresponding funding is shifted to the second call.

A new meeting appears useful to the SWWT members, in order to increase understanding of the H3 unit expectation in this field and for hopefully prepare better proposals to be submitted in response to the FP6 second call.

Concluding remarks

1. News :

The work programme for the second call in Aeronautics & space is being soon slightly updated by 24/09/2003; the final issue is expected for 9/10/2003. Dates for the call are only tentative (publication in November, closure in February ?)

2. Evaluation after First call

The SWEET proposal (*Space Weather: Elaboration of European Tools*) was considered relevant by the referees, which shows that space weather is relevant in the context of the FP6 work programme and is encouraging for the submission of a revised proposal.

However the H3 unit is much more reserved about WP1000 (*Models and observations of the Sun and the solar wind*) and WP2000 *(Spacecraft environment*). A potential interest is recognised for navigation, and a weaker one for telecommunication.

3. General concern : FP6, GMES, ESA and SW

A. Glover presented the ESA Space Weather Application Pilot Project (SWAPP) and insisted on the fact that the current SWAPP is an ESA initiative with the intention of initiating a coordinated SW service activity. To do this ESA has adopted a broad approach making sure that activities not traditionally covered by the ESA programmes, e.g. GIC monitoring, HF communication will also be developed and funded at the same level as more traditional space-related activities. If the concept of a coordinated SW activity is demonstrated to be sound over the course of the 2-year project and a successful network is established, an alternative source of funding must be found to continue maintenance of the network after the ESA funding comes to an end in 2005. An important goal of SWWT is to identify this source of funding for which some of the EU programmes are more natural candidates than ESA.

H. von Bose reminded that through the FP6 the H3 unit is wishing to validate the existing scientific issues or to stimulate the research necessary for supporting the applications. To introduce SW under GMES/ Risk management, one has to demonstrate that space weather has drastic effects on GMES applications and basic GMES services, or on other interests like navigation (Galileo) or telecom.

It was reminded that EU is concerned to not duplicate what is under the scope of ESA like basic space research or spacecraft technology. C. de Matos stated that the “pilot projects” should give an opportunity to clarify the way ESA and the EU may collaborate on these particular issues. H. von Bose stated its interest in the benefit analysis activity of the services of the pilot projects.

4. Proposal to the Second call

It was confirmed that a proposal of a space weather activity within the *Aeronautics & space / GMES/ Risk* management would be most appropriate as a STREP, e.g. 18 months, with budget of 2,5 Meuro in a 8 member consortium.

For all proposed activities, it is mandatory to clearly explain the cooperation, interaction and sharing of responsibility between EU and ESA.

Contacts with another ”risk consortium” like Eurorisk may be fruitful, perhaps for integration to a large “risk Integrated Project”, or more probably for finding relationships, non-redundancies or complementarities, eg via harmonised deliverables.

The H3 unit is ready to examine a new draft proposal and to discuss later again when more work for the proposal has been done. In fact, an interaction with Commission people is mandatory in practice. They may also perform a pre evaluation of a draft proposal (pre-screening).

Global change (analysis of French participations), Paris, 8/9/2003

Miscellaneous info and comments after four success stories (2 NOE, 2 IP) in thematic priority 6 (Global change, energy, environment) in French returns in FP6 first call. Obviously, we cannot directly extrapolate neither from our experience with SW, nor from what happened in other projects in other circumstances.

- successful proposals result from core team having worked altogether for several years (eg in previous FP);
- they were in permanent contact with scientific officers in Brussels during the preparation phase,
- they have taken benefit of the earlier steps, including the pre-screening and EOIs; they approached other concurrent or complementary proposers,
- they received a strong support from national bodies,
- the proposal were built modular (subsets of work packages), in order to anticipate on the negociation,
- the hope for funding was not the essential motivation for the proposal,
- during the current "negociation phase" the projects may be strongly reduced (up to 50% of expected fund) with a corresponding removal of too expensive work-packages;
- they paid a strong attention to the "evaluator guide";
- they introduced concrete proposals in the "gender issues"
- some of them called for an external consultant to write the proposal;

About the future "call"

- the Work programme will be (probably) amended, we will have to consider carefully the actual text and possible instruments (STREP, IP ?);
- the different DG in EC (DG-RTD, DG-TREN), and the different subprogrammes (Aeronautics, Space, Transport, Environment, …) may have different ways of thinking and doing. For instance, the next call for global change will be made in 2 steps (short document for preselection, then long proposal if selected);
- there are other paths and procedures than the Thematic priorities which may be funded, eg the "Box 8" (SME, NEST, SSP) or Infrastructures;

FP6, Aeronautics & space, GMES, Work programme (issue 21, 19/09/2003)

(page 33) modifs in GMES,Risk management:

c) Risk management

The aim is to improve the provision and integration of satellite data into information systems to support the decision-making chain and processes related to risk management throughout the different phases of the risk. The solutions must be applicable at global and regional levels and be able to ingest all types of data issued from Earth observation satellites, in-situ measurements and field data. The Space/GMES work programme ensures the co-ordination with the other thematic priorities and contributes with specific added-value services.
The work programme includes:

- the collection and harmonisation of the requirements expressed by users (e.g. civil protection, local or regional authorities, environmental agencies, NGOs) and other services of the Commission.
- the consideration of national and international initiatives with the set-up of proper interfacing mechanisms.
- the expression of the overall system specifications and operational constraints in order to ensure the rationalisation of the organisation required for the production of adequate information, particularly considering the intrinsic characteristics throughout the different phases of each risk. Specifications for standards will be prepared. Users will be involved from end to end.
- the inclusion of available risk-related research results and building blocks. Lessons learned from past projects will be clearly taken into account. The added value to existing decision support tools, operational capabilities and infrastructure will be described.
- the validation of the implemented systems, operational tools and services in specific centres and/or at users premises. Plan for routine operations will be included.

Specific hazards to be covered are industrial hazards, floods, storms, forest fires, earthquakes, landslides, volcanic eruptions, drought and other natural phenomena generating hazards ***[including space weather]*** .The project should provide solutions for each hazard starting from the mature ones and preparing the ground for the others.
The project should include an overview of the risk management issues.
Preference will be given to an Integrated Project.

(page 33)

c) Data harmonisation

The Infrastructure for Spatial Information in Europe (INSPIRE) is a set of actions for the creation of a networked information infrastructure that assist multiple user communities in collecting, sharing, accessing, and using environmental and geo-referenced information and resources. The actions relate to the technologies, policies, standards and specifications necessary to establish and enhance a common environmental info-structure. The user communities include government, the private and non-profit sectors and research and academia.

Central to the successful technical implementation of INSPIRE is the development of common standards and specifications for data documentation, collection, and exchange taking into account existing ones.

A dedicated data harmonisation project is called for to increase the level of interoperability among geospatial information systems.

The work programme of the data harmonisation project will build on specific and common spatial data requirements derived from the thematic GMES projects in the six fields of applications (Land Cover and Vegetation, Water Resources, Ocean and Marine Applications, Atmosphere, Risk management, Security). It will focus on a subset of spatial data components considered very important for the interoperable functioning of INSPIRE within the following classes of components:

1. Geographical location	7. Transport	13. Ocean and seas
2. Administrative units	8. Utilities and facilities	14. Biota/biodiversity
3. Properties, buildings and addresses	9. Society and population	15. Natural resources
4. Elevation	10. Spatial planning / Area regulation	16. Natural and technological risks
5. Geo-physical environment	11. Air and climate	17. Areas under anthropogenic stress
6. Land surface / land cover	12. Water / hydrography	

The data harmonisation project should consider the research and development support on: Multi-lingual support for Geographical Information standards, data model generalisation, semantic interoperability and ontologies, Feature Transformation Services, data modelling and data re-engineering, including cost/benefit analysis.

Use of non-proprietary standards such as ISO standards for geographic information (in particular the ISO 19100 series of standards) and OpenGIS specifications is required. The expected outcome are Geospatial Data Implementation Specifications (– feature catalogues, thesauri, European data models) including guidance documentation, examples, and open source software tools. Preference will be given to a Specific Support Action.

Reference to INSPIRE initiative: INfrastructure for SPatial InfoRmation in Europe

In paragraph “Data harmonisation” following “Risk management” inside the Work Programme A&S, we may find useful tracks after extended Geographical Information standards about : environmental and georeferenced information, Risk management, Security, Natural & technological risks.

INSPIRE (Infrastructure for Spatial Information in Europe) is a recent initiative launched by the European Commission and developed in collaboration with Member States and accession countries. It aims at making available relevant, harmonised and quality geographic information to support formulation, implementation, monitoring and evaluation of Community policies with a territorial dimension or impact.

INSPIRE is a legal initiative of the EU that will address technical standards and protocols, organisational and co-ordination issues, data policy issues including data access and the creation and maintenance of spatial information.

INSPIRE is the first step of a broad multi-sectoral initiative, that will initially focus on spatial information needed for environmental policies and that will be open for needs of other policy areas, such as agriculture and transport.

The three Commissioners responsible for Environmental policy, for Statistics and for Research have signed a Memorandum of Understanding on the development of the INSPIRE initiative.

See also : http://www.ec-gis.org/inspire/

Green paper :

Please consider : ESF Statement on the Green Paper on European space policy
http://www.esf.org/publication/162/ESPB22.pdf

As already said there is practically no input from the SW community in this White-Green paper. After Luc Tytgat, it may be not too late !

21 things to do before submitting a proposal

A check list by Tom McKINLAY (DG INFSO) in a recent meeting in Milano.
Even if devoted to IST activity, most of items apply generally to all disciplines !
http://www.telecom.gouv.fr/programmes/ist/index.htm