

## Draft of short report on SWWT #25

Prepared by Mike Hapgood, 11 September 2009

The ESA Space Weather Working Team (SWWT) held a plenary session at the Royal Observatory of Belgium (ROB) on 4 September 2009; this was attended by around 60 members of the European space weather community. The principal aim of the meeting was to discuss the 3<sup>rd</sup> Space Call of the EU Framework 7 programme which had been opened a few weeks earlier.

The presentations from the meeting will be made available on the SWWT mailing list web site, subject to the authors' permissions (which have been requested). Please see directory at: <https://www.jiscmail.ac.uk/cgi-bin/filearea.cgi?LMGT1=SWWT&f=/swwt25>.

The Chair of SWWT (Mike Hapgood) opened the meeting and invited Ronald van der Linden (Director, ROB) to say a few words of welcome. Mike then outlined a few key points about the Space Call. In particular, he noted that the call included indicative funding of 22 MEuros for research to improve the security of space assets against space debris and space weather. Given the caps on the funding of individual proposals (2 MEuro for collaborative projects and 500 kEuro for coordination and support actions), there was the potential to fund a number of space weather projects. It was therefore important for the community to put forward a number of well-focused and complementary proposals.

This was followed by a detailed presentation on the Space Call by Mats Ljungqvist from the Commission. Mats outlined the full range of activities in the Space Call with focus on the sub-call about protecting space assets from space weather, but also mentioning other sub-calls of interest to the space weather community, e.g. funding for better exploitation of data from space science missions. Mats answered a wide number of questions about the Call. Key issues include:

- That the Call can fund studies to improve security of ground-based systems against space weather - including power grids and communications, not just ground systems for spacecraft.
- The importance of producing the best proposal, explaining the rationale of how the project will be organised and getting clear evidence of participation by third parties (e.g. a letter of intent).
- It is important to have the right consortium – all members should provide critical contributions and not be there just to improve the geographic distribution.
- It is also important to have a coherent project and bid for the right sum of money to implement that – don't expand the work and the money in order to reach the funding cap.
- Russia may join Framework Programme as a member – discussions are in progress, but may not complete until FP8.
- US groups can be funded by FP7 but it requires strong justification of why they provide a critical contribution that requires funding.

Mats also introduced his colleague, Paola Chiarini, who is a project officer for space research at the new Research Executive Agency (REA), which has been set up to administer FP7 projects. This separates administrative aspects from the policy work in the Commission and has the aim of improving the speed with which FP7 proposals are handled. Paola introduced herself to the community. She particularly noted that REA had set up a generic email address for inquires about the current Space Call. It is

*REA-SPACE-CALLS@ec.europa.eu*

There then followed a series of short presentations on ideas for FP7 proposals:

- Holger Sdunnus (EtaMax), development of software systems and hosts to support services developed by a proposal, setting up a research modelling VO, wishes to be a contributor, not coordinator
- Gareth Lawrence (Rhea), space consultancy firm with wide experience. Presented strengths in space environment and development of ESA software products. Experience working with ESA standards. Would like to provide software and/or coordination skills to project.
- Veronique Delouille (ROB), ideas for better exploitation of SDO data building on experience and capabilities at ROB, effort to improve access to data in Europe
- Thierry Dudok de Wit (LPC2E), orbitography: improve thermospheric density models for a better now- and forecast of satellite drag. Looking for data partnerships for operational use, physical modelling thermosphere-ionosphere.
- Mike Hapgood (RAL), for European Research Network of Ionospheric and Plasmapheric Observation Systems – looking at SSA applications (GNSS, radar correction, HF Comms) affected by ionosphere and plasmasphere.
- David Jackson (UK Met Office), presented skills in data assimilation, can build on experience gained in the GEO6 project, looking for partners who wish to follow the assimilative route, e.g. in thermosphere-ionosphere studies
- Misha Balikhin (University of Sheffield), skills in modelling of linear systems, also in space environment instrumentation, e.g. the Obstanovka environmental monitoring package for ISS.

Mike Hapgood then undertook his last action as SWWT Chair – formally handing over to his newly elected successor Norma Crosby. Norma gave a short presentation on her vision for the future of SWWT. She particularly emphasised

- developing the SWWT as a focus for space weather inputs into the SSA advisory structure,
- producing an updated space weather roadmap for Europe,
- leading community efforts to lobby for an expanded space weather activity at the next ESA ministerial council meeting (2011)
- coordinating community inputs to future FP7 Calls

This was followed a short presentation by Alexi Glover on plans for the 6<sup>th</sup> European Space Weather Week (Bruges, 16-20 November). She noted that the deadlines for abstract submission and hotel block bookings were coming up soon (14<sup>th</sup> and 16<sup>th</sup> September respectively).

The meeting then returned to the FP7 Call with a presentation by Alain Hilgers on the status of ESA Space Situational Awareness programme and some ideas on how FP7 proposals could address the Commission's requirement for complementarity with ESA activities and in particular the SSA programme. This was followed by further audience discussion on FP7 proposals until the meeting closed at about 15:30.