

Space Weather Working Team: Terms of Reference.

{26th January 2007}

The SWWT is a forum open to European experts in space weather applications and related science.

The SWWT investigates space weather applications' requirements, space weather services and the underpinning research and development. It also advises ESA on strategies and activities related to space weather.

The SWWT will promote activities aiming towards the development of European operational space weather capabilities. This will include coordination of developments at European, national and industry levels. Activities can include development of applications and/or research into the underpinning science.

The SWWT seeks to identify and discuss potential collaborations and/or synergies with other structures or organizations.

The SWWT will be responsible for establishing and monitoring the execution of a roadmap for space weather operational services and associated research.

The SWWT will facilitate the exchange of information on European, national and industrial activities, will draw conclusions, will integrate activities into the above roadmap where appropriate and will make recommendations to European and national agencies and industry concerning execution and coordination of activities..

The SWWT will take the necessary steps to organize its work including updating and maintaining Annex A (Mode of Operation).

Annex A: Mode of Operation.

SWWT membership is open to representatives of any institute or company currently undertaking space weather related activities. The SWWT meets at approximately 6 monthly intervals. In addition, several "Topical Groups" maintain regular contact via email. The Chairperson will be chosen by the membership through an election. The mandate shall be for a period of 2 years with an option to extend by 1 year.

The SWWT shall establish a Steering Board (SB) to act as an executive group. The SB shall consist of:

- the SWWT Chairman,
- representatives of national and European funding agencies that support significant space weather activities
- experts in areas of technical and strategic importance. These shall be selected by the Chairman in consultation with ESA.
- the ESA representative to ILWS

This SB will synthesize the roadmap and recommendations from the SWWT for presentation to agencies and other concerned parties, as appropriate. The Steering Board shall establish its own working practices.

The SWWT will seek to identify and discuss potential collaborations and/or synergies with other structures or organisations including, but not limited to, the ESA SEENoC, ESA NoE on Propagation, EC FP & COST programmes, ISES, COSPAR, SCOSTEP and ILWS.

The SWWT will assist ESA in evaluating the lessons learned from the operation of the space weather applications pilot project and how these can be implemented within a strategy for any future space weather programme.

All members are invited to participate in topical working groups (TWG). TWG are responsible for initiating projects, discussing new advances and/or progress in existing research and service development. TWG will also be responsible for promoting pilot project activities within Europe and among the communities outside.

The current list of topical groups is as follows:

1. [Fundamental Research](#) (e.g. solar, S-T, including future missions and instrumentation)
2. [Ground Effects](#) (GIC, prospecting, tourism)
3. [Atmospheric Effects](#) (incl. Drag)
4. [Ionospheric Effects](#)
5. [Spacecraft, Launcher & Aircraft Environments](#)
6. [Education, Outreach and Emerging Markets](#)

Annex B: Topical Groups

In addition to attending regular 6 monthly meetings, all SWWT members will be invited to participate in topical working groups (TWG).

SWWT members will be free to join as many TWG as they wish, depending on their research interests.

Each TWG will elect a spokesperson responsible for maintaining regular email contact amongst the TWG members and reporting to the SWWT at each 6 monthly meeting.

Regular email contact between the TWG members will be maintained by the group spokesperson.

TWG will be responsible for initiating projects, discussing new advances and/or progress in existing research and services and promoting related space weather pilot project activities within Europe and to communities outside.