

**SWWT Plenary Meeting Agenda – 13:30UT-15:00UT –
Wednesday 26 October 2022 at ESWW2022 (Meeting Room “Water”),
Zagreb, Croatia.**

Meeting started at 13:31UT.

1. Welcome [~2 minutes].
 - Mario welcomed everyone to the SWWT Plenary and thanked them for coming to the meeting. He also explained that he took over, officially, as the SWWT Chair just a few months ago this calendar year. Mario also thanked Stefaan for his many years of Chairing the SB, and suggested a round of applause for Stefaan’s years of work and effort.
 - Participation here today:
 - o ~45 online attendees.
 - o ~165 in-room attendees.
 - ~210 total attendees.

2. A brief outline of the Space Weather Working Team (SWWT), the Steering Board (SB), and looking towards the future, by Mario M. Bisi (SWWT Chair) [~15 minutes including any questions].
 - Mario presented the background to the SWWT, SB, and future opportunities (please see the slides).
 - Mario thanked the current and passed SB members for all the work they have undertaken over the years.
 - There were no immediate comments/questions from the room.
 - There was active discussion in the online chat about ESSC and member-states representation and interaction/interfaces back to member states.
 -

The following comments were raised in the chat and have been recorded for further discussion at the next Steering Board meeting

 -
 - It was highlighted in the chat that historically, a key role of the SB has been to engage with experts across Member States who can engage with their National Representatives, but with a coordinated approach across the SB. Therefore allowing the community to communicate common messages back to their national reps (the key decision makers) as well as to ESA. It was pointed out that representation of S2P states needs to be carefully considered if the ESA SWWT was recognised as an official advisory body to the ESA Space-Weather Programme Office.
 - It was agreed, in the chat, that there is a need to coordinate with work (*e.g.* in E-SWAN) in talking with national reps to international programmes (*e.g.* Horizon Europe).
 - A comment (with agreements) was made in the chat that having an ESA Vice Chair would strengthen the interface with ESA, as noted, but could weaken the influence the ESA SWWT would have as its leaderships would be less independent of ESA; Politically, it would be better to give the weight to the independence!
 - E-Mails were received related to needing to be careful to define well the new ESA SWWT to ensure there are good definitions of its remit, what is space weather, will space climate really feature? Where does science fit in?

3. Prospects for the ESA S2P Period 2, by Juha-Pekka (Jussi) Luntama (ESA Space Weather Office) [~20 minutes including any questions].
 - Jussi provided an update and overview of the current activities and future plans/opportunities currently set out in the ESA S2P Period 2 (please see the slides).
 - Jussi emphasised that there are opportunities for new services linked to the utilisation of data from the new/upcoming planned missions.
 - o Includes data assimilation and modelling opportunities.
 - o Continued support for end-to-end modelling as part of S2P Period 2 developments.
 - Very positive that the needed support for ESA Vigil is foreseen to be achieved for going forward with the mission implementation.
 - Description of the EU entrusting ESA to implement the space weather activities for EU Space Programme objectives:
 - o An ITT is envisaged shortly for a new cost benefit analysis for space weather services in Europe.
 - There will not be a huge amount of money involved in the EC SSA budget for space weather in MFF 2021-2027, but this is considered to be a starting point with a positive outlook for increased funding in future MFFs.
 - o The COPERNICUS Programme was mentioned as an example where a similar evolution took place in past.
 - The ITTs for the activities entrusted to ESA by EU would come out using ESA ITT system, not EC/EU system.
 - What is the basis of ground-based data in the ESA calls, explicitly?
 - o The call will ask for services. The services will require data, so the proposal will need to indicate how these data will be acquired.
 - Noted that there will likely not be enough budget to cover the full cost of GB data services in their entirety at this stage so a balance will need to be found.
 - What about the HORIZON Europe Programme budget from the EU?
 - o It will be spent in ~three rounds of calls leading up to 2028.
 -
 - o Final € amount is not yet fully decided.
 - First slice of the budget for 2021-2022 is just over €2M.
 - There was dismay in the audience that this was again such a tiny amount of money and that not much could really be done with this.
 - o
 - A question was raised in the room commenting that some clauses often contained in ESA ITTs may make many people more expensive...
 - o Could the clauses lead to the ITTs being interpreted as commercial contracts rather than research activities?
 - o Could these clauses work against inclusion of PhD students and PDRAs?
 - ESA (Jussi) noted that the exact clauses in question should be identified before any further assessment will be possible.
 - Jussi emphasised that the contracts in space weather activities entrusted to ESA by EU would be different from standard ESA contracts.
4. The Next Steps for the ESA Service Network, by Alexi Glover (ESA Space Weather Office) [~15 minutes including any questions].

- Alexi summarised the wealth of services now available with the support/user guidance; please see the slides for further details.
 - SWE Portal Release 3.5.0 on 11th October 2022.
 - Preparations for 3.6.0 in Spring 2023 is already well underway.
 - o Spacecraft operators support will be targeted in the next release.
 - A number of activities are still running and upcoming in P1 of the S2P Programme, as well as in P2.
 - New alert and aggregation module planned as part of major service system upgrade targeted for Period 2.
 - Comment from the room that there are some unclear listings on the services portal with URLs not listed and only scripting taking place – leads to a complicated process of getting data.
 - o Alexi agreed that the search and navigation on the service portal is really important and is being actively worked on at the moment to simplify the approach (looking at the number of clicks needed, etc...).
5. Upcoming Opportunities Within the ESA Technology Programmes, by Piers Jiggins (ESA Space Environment and Effects Section) [~15 minutes including any questions].
- Piers highlighted the key Technology Development Element (TDE), GSTP, and OSIP avenues of funding; please see the slides for further details.
 - o TDE is lower TRL technology programme and part of the mandatory programme and therefore open to all member states.
 - o GSTP has to have the support of the national representative to be able to join into a call.
 - A brief highlight of space-climate activities funded in the past.
 - The SWEN is issued every ~six weeks; please send any content in that's of relevance to the wider community.
 - “Mare Sample Return” on slide 4 is a typo; it should read “Mars Sample Return”.
 - Slides 6 and 7 are considered to be the most-important slides.
 - o They show open and intended call opportunities along with the TDE Workplan for 2023/2024; several are space-weather and/or space-climate related and would be of interest to this community.
 - o The website is also listed of where to find these (esa-star)...
 - How do the gaps in areas get investigated and identified?
 - o Each round for the TDE have a plethora of activities proposed and these are filtered through ESA Directorates and roadmaps. These are assessed on the basis of planned/upcoming missions. There is some bounding by this.
6. Topical Working Groups as they stand, and potential thoughts for the future, by Mario M. Bisi (SWWT Chair). [~8 minutes including any questions]
- Please see slides for information.
 - Seems a consensus that the TWGs are not viable in their current form, and that some more strategic-type groups are needed.
 - o Options perhaps to mirror the ESC setups/structures?
 - o Must not forget the links to other international/roadmap initiatives.
 - o Would be good to still have the overarching/education/outreach flavoured groups in there also...
 - o Clear need expressed by ESA for increased service user involvement.
7. AOB from the community including open Q&A [~15 minutes].

- Mauro Messerotti commented online that it would be good to have synergy with the ESF ESSCs and this is to be potentially followed-up on at a later date by the SB.
- SB representation; refers back to the earlier discussion.
- Observation Forum pitch from Piers – explaining what this new idea from the PC actually is...
- Mario thanked everyone for attending, for the helpful and interactive discussions both from the room and online, and asked everyone to watch this space as the (ESA) SWWT evolves into its “fifth?” form...

Meeting closed at 14:57UT.