

## Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee 60<sup>th</sup> Session

### Agenda Item 10: “Space Weather”, February 2023

#### Statement by Prof. Hermann Opgenoorth from COSPAR, on behalf of the WMO, COSPAR and ISES

Chair and Distinguished Delegates,

Thank you for allowing me this opportunity to report on progress towards improved international coordination and collaboration towards improved global space weather services. I am presenting on behalf of the Committee on Space Research (COSPAR), the World Meteorological Organization (WMO), - and International Space Environment Service (ISES). It is my pleasure to provide Member States with an update outlining activities and future plans in response to Recommendation 1 of the Final Report of the Expert Group on Space Weather ([A/AC.105/C.1/L.401](#)), adopted by Subcommittee at its 59<sup>th</sup> Session and endorsed by the Committee at its 65<sup>th</sup> Session in 2022. Recommendation 1 from the Final Report was for WMO, COSPAR and ISES to lead efforts to improve the global coordination of space weather activities in consultation and collaboration with other relevant actors and international organisations, including COPUOS. This recommendation has been enthusiastically endorsed by representatives of all three international organisations. Consistent with the recommendations from the Final Report of the Expert Group, we encourage all Member States of the COPUOS to continue to contribute to this activity through their national agencies, and through their active participation in the COSPAR, WMO, and ISES and other international stakeholder organisations.

A letter from UNOOSA dated 1<sup>st</sup> July 2022 was sent to WMO, ISES and COSPAR to invite the three organisations to act on the Recommendation. Each of the three organisations deemed it necessary to respond positively and at the earliest opportunity; hence two representatives from each of the three organisations met in person in Coimbra, Portugal in September 2022. During the two-day meeting, the roles, responsibilities, and activities of each organisation were discussed, and a way forward in progressing the Recommendation was considered. Distinct domains of activity were defined where each organisation would take a leadership role based on its own specific expertise, and overlapping areas of activity between the organisations were discussed. It was agreed that defining and implementing joint pilot projects together, leveraging each organisations’ strengths, would lead to greater results.

As a direct outcome of the meeting, the ‘WMO-ISES-COSPAR Coimbra Declaration’ was drafted, providing a framework for advancing the international partnership between the three organisations, and through which a wider international coordination between space weather actors could be achieved. The Coimbra Declaration establishes that the three organisations have agreed in principle to the following:

1. To respond positively to the COPUOS invitation to take a leadership role in delivering improved global coordination as equal partners;
2. That WMO, ISES and COSPAR take a leadership role in three distinct domains of activity, respectively: Facilitating Integration, Operations and Services, Research and Development;

3. To add cross-membership between the organisations on relevant committees and groups, to facilitate improved information flow;
4. To work towards formalising the partnership through an appropriate formal agreement;
5. To identify and collaborate on joint pilot projects between the three organisations;
6. To meet together in-person at least every six months, exploiting opportunities to meet in conjunction with, or on the margins of, other meetings, as appropriate. Such regular in-person meetings to be supplemented with additional intersessional virtual meetings. And to discuss with the broader community as appropriate.
7. To jointly organise a round table in 2023 for participants from appropriate international organisations, to discuss information exchange and international coordination;
8. To report back to COPUOS at the STSC 60<sup>th</sup> Session in February 2023, on progress since Recommendation 1.

The Declaration is currently under review by respective governance for final adoption in all three organisations.

The near-term focus will be to identify and initiate joint pilot projects for collaborative implementation by the partners. In 2022, suggestions for joint pilot projects were sought from WMO, COSPAR, and ISES Members and from the wider space weather community, including through meetings at COSPAR in Athens and at European Space Weather Week (ESWW) in Zagreb. The three organisations are also planning arrangements for a international space weather round table in late-2023, involving international stakeholder organisations, and seeking agreement on a mechanism for improved future coordination, and to identify priorities for the projects to be jointly implemented by the respective organisations.

As part of its work, the Expert Group on Space Weather conducted two surveys of Member State preparedness, and of the related activities of national and international organisations active in, and impacted by, space weather. Consistent with Recommendation 4 from the Final Report from the Expert Group on Space Weather (A/AC.105/C.1/L.401), adopted by the Subcommittee at its 59th session, we also find that this data will have value in informing future priorities for improved global space weather services. Whilst maintaining the confidentiality of the submissions, Member State approval for the transfer and use of the survey data collected, and currently held, by the Australian Bureau of Meteorology to custodianship at the WMO would enable such data to continue to be used to advance the goal of improved international space weather services. This could include follow-on activities by the WMO Expert Team on Space Weather (ET-SWx), within the WMO-ISES-COSPAR partnership, and in support of ongoing work of the Working Group on Long-Term Sustainability of Outer Space Activities (LTS 2.0).

In the longer-term, WMO, COSPAR and ISES are committed to improving global coordination of space weather, through the implementation of joint activities and building stronger and active partnerships with other relevant actors. Through promoting communication and coordination, the organisations see a pathway forward to deliver improved services, avoiding duplication of effort, and harmonising their activities. Advancing coordination will promote scientific understanding of the space environment and deliver improved space weather services – towards improved global resilience and preparedness against the threat of space weather.

In closing Chair, the WMO-ISES-COSPAR partners would welcome any feedback from COPUOS Member states on the progress to date. We further welcome the renewed and active participation of Member States in developing an optimised and internationally coordinated approach to mitigating the adverse impacts from space weather. We would also like to thank the Expert Group on Space Weather for its efforts towards this goal. Thank you, Chair.