



## COSPAR Statement to the 59<sup>th</sup> Scientific and Technical Session of COPUOS

14 February 2022, Vienna, Austria

### Item 11

Mr. Chair, Distinguished Delegates, Dear Colleagues

It has been a pleasure to listen to the presentation of Dr. Ian Mann, the Chair of the Expert Group on Space Weather, and to take note of the recommendations made by this group of distinguished international experts.

In particular we noted Recommendation #1, where the Subcommittee, through the secretariat, is recommended to invite three global organisations - already deeply involved in fundamental and global space weather issues, including science, standards, predictions, warnings and mitigation - to form a future partnership. In response to this action, they would lead the necessary and urgently required efforts to improve the global coordination of space weather activities, which are already undertaken by a large number of states members and other stakeholders.

COSPAR, one of the organisations addressed by this recommendation, has since 1962 enjoyed observer status at UN COPUOS. These early and fruitful contacts have further been strengthened by a Memorandum of Understanding between UN-OOSA and COSPAR signed in 2017. The memorandum secures scientific advice and formalises a partnership between UN-OOSA and COSPAR to collaborate on a number of global coordination issues - notably Space Weather and Planetary Protection - two topics which have become ever more important in the rapidly growing use and exploitation of space by mankind that we have experienced over the more than 60 years of this fruitful collaboration. In both areas the scientific understanding of the involved mechanisms is still not sufficiently advanced to meet the needs of humankind. Additional research is required to refine the operational approaches needed to fully mitigate detrimental effects.

COSPAR today continues to promote the importance of global collaboration in a wide variety of scientific endeavours. Through its Panel on Space Weather, COSPAR has taken a leadership role in promoting the international coordination of scientific activities directed towards advancing the fundamental understanding of the processes which drive space weather. In 2018 new and stronger Terms of Reference were defined for the Panel on Space Weather, including a wider and more formal membership of space weather stakeholders. These new efforts additionally endorsed a leading role for COSPAR in promoting the improved communication between, and collaboration amongst, such space weather stakeholders and agencies, with a renewed focus on targeted research addressing the understanding of space weather impacts.

Following the original development by COSPAR of a first Scientific Roadmap for Space Weather for the period 2015-2025 (Schrijver et al., 2015), the COSPAR Bureau has endorsed regular updates to this space weather roadmap by the Panel of Space Weather, with the aim to turn the Roadmap into a "living" document, addressing the actual and growing global needs.

In consequence the COSPAR Panel on Space Weather has initiated a community driven, bottom-up approach to foster, monitor and report on scientific progress in space- weather-enabling-science, the International Space Weather Action Teams (ISWAT, <https://iswat-cospar.org>). A large number of ISWAT teams, clustered by regimes, cover all necessary science aspects of the interconnected plasma system from Sun to Earth (and even to the Moon and other planets) that forms the realm of space weather.

COSPAR is looking forward to receiving an invitation letter from COPUOS - via the secretariat - to collaborate with WMO and ISES on a further improvement of global consolidation and coordination of international efforts. The Bureau of COSPAR and the Panel of Space Weather are both capable and willing to combine COSPAR's scientific expertise, experience and ongoing efforts with the large and complementary experience of the other two potential partner organisations which are explicitly

addressed by recommendation #1, i.e., WMO and ISES. We look forward to working together and joining our efforts towards the development of a coordinated global system for the understanding, prediction, warning and mitigation of detrimental space weather impacts on our society.

In closing, I would like to take the opportunity to thank the entire team of experts in the Expert Group on Space Weather, and in particular Dr. Ian Mann of Canada, for their hard and tireless work over the last 8 years, to negotiate and shape out the important observations, recommendations and conclusions, which we just heard.

I also would like to thank the Secretariat, in particular the Director and staff of UN-OOSA, for their important work in supporting the STSC, its expert groups, and for maintaining and constantly improving the relationship with COSPAR - and thereby with scientists all around the world.

Thank you very much, Mr. Chair, on behalf of COSPAR and the Panel on Space Weather (PSW) for this opportunity to speak.

Hermann J. Opgenoorth, on behalf of COSPAR