

**Statement by Kevin Conole, United States Representative,
on Agenda Item 11, “Space Weather,” February 8, 2022**

Thank you, Mr. Chair and distinguished delegates. The United States remains committed to advancing our space weather observation and prediction capabilities, and we look forward to enhancing international cooperation as countries around the globe continue to expand their related interests and capabilities. Space weather is a global concern, requiring understanding, preparation, and coordination to predict potentially severe events and to mitigate their impacts. Continuous space-based and ground-based measurements and focused research efforts are improving our modeling and forecasting capabilities. Our coordination and cooperation with partners around the globe help enhance our understanding of the breadth of impacts of space weather as well as partners’ investments, thereby improving our capacity to predict and mitigate severe space weather events.

The United States leads and participates in numerous initiatives to improve space weather observations and services to advance the scientific understanding of the space environment and provide warning of critical space weather events. The 2021 U.S. Space Priorities Framework calls for the United States to protect space-related critical infrastructure and strengthen the security of the U.S. space industrial base, including enhancing the protection of critical infrastructure from space weather events. We continue to work across all U.S. departments and agencies to implement the 2019 National Space Weather Strategy and Action Plan.

The United States remains committed to supporting and implementing the Long-Term Sustainability of Outer Space Activities (LTS) Guideline B.6, to share operational space weather data and forecasts, and Guideline B.7, to develop space weather models and tools and collect established practices on the mitigation of space weather effects. The United States makes its space weather data and forecasts available on a full and open basis, and we continue our research efforts to advance our space weather models and to work with our international partners around the world to strengthen our operational space weather forecasts. Three U.S. agencies: NASA, NOAA, and the National Science Foundation fund research efforts to enable improved space weather forecasting. A focus on transitioning advanced research models, techniques, and technology to operational environments is reflected in the 27 funded efforts by NASA and NSF over the last year to academia and the commercial sector.

The United States strives to improve its space weather observing infrastructure and to maintain long-term continuity of essential observations. In this regard, NOAA planning continues for the launch of its Space Weather Follow On (SWFO) in 2025. SWFO will maintain continuity of space weather observations of solar coronal mass ejection and space weather conditions upstream from Earth at Sun-Earth Lagrange point 1. International cooperation is key to NOAA's space weather observation plans, including a soon-to-be signed agreement with the European Space Agency, which includes the exchange of instruments for hosting on each other's space-based space weather observing missions. Additionally, NOAA is organizing its satellite programs to include a new Space Weather Observation portfolio, which will ensure that critical observations will be sustained, improved, extended and potential gaps in observations mitigated to support NOAA space weather forecast operations, as authorized by the Promoting Research and Observations of Space Weather to Improve the Forecasting of Tomorrow Act.

NASA continues its commitment to melding space research and space weather observations through its missions. Active discussions between NASA and NOAA are ongoing regarding the Geospace Dynamics Constellation mission in development. Furthermore, NASA is developing, with international partners (ESA, JAXA, CSA), three space weather instrument suites - the Heliophysics Environmental and Radiation Monitoring Experiment Suite (HERMES), the European Radiation Sensor Array (ERSA), and the Internal Dosimeter Array (IDA) - to be launched to cis-lunar orbit on the Gateway. These are pathfinder payloads for future deep space human exploration.

In closing, Mr. Chair, the United States congratulates the Expert Group on Space Weather on completion of its survey and the development of recommendations to help ensure all Members are making progress toward implementation of the LTS Guidelines for Space Weather. We look forward to continuing discussion of progress towards the implementation of the LTS guidelines through this agenda item on Space Weather as well as through our cooperation with the other international bodies such as the World Meteorological Organization, the International Civil Aviation Organization, the Coordination Group for Meteorological Satellites, the Committee on Space Research, the International Space Weather Initiative, and others. Thank you, Mr. Chair.