Statement by Kevin Conole, United States Representative, on Agenda Item 10, "Space Weather," February 12, 2019

Thank you, Madame Chair and distinguished delegates. Before I begin reading our statement, the U.S. delegation would like to express our sincere condolences to the Russian Federation on the passing of Georgiy Barsegov and to Austria on the passing of Ambassador Christine Stix-Hackl. The United States is committed to advancing our space weather capabilities, and we look forward to further cooperation as interests and capabilities continue to expand around the globe. As we heard so compellingly articulated during yesterday's COSPAR symposium, space weather is an international 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. Broad participation from countries around the globe helps us understand both the drivers and the impacts of space weather, thereby improving our capacity to predict and mitigate severe space weather events.

The United States is leading and participating in numerous initiatives to improve space weather services and to advance the scientific understanding of the space environment. In response to the 2015 U.S. National Space Weather Strategy and Action Plan, we developed a set of initial benchmarks for extreme space weather conditions, and improved our mitigation and protection plans. We are now in the process of revising our Strategy to capture this progress, and to address new areas of focus [such as space exploration].

In order to accelerate the development of space weather services and improved scientific understanding, three U.S. agencies: NASA, NOAA, and the National Science Foundation, have initiated a new, coordinated funding opportunity to support scientists to advance targeted space weather capabilities. The most recent funding opportunities focus on improved prediction of geomagnetic storms and the radiation environment impacting satellites, humans in space, and commercial aircraft. We welcome the opportunity to discuss these and other initiatives with Member States and observers. For example, in December we

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organized a workshop with the European Union looking at potential mechanisms to increase cooperation between European and U.S. scientists.

In November 2018, the International Civil Aviation Organization designated global and regional service centers to provide space weather information for civil aviation. The U.S. will serve as one of the global centers, and we look forward to working closely with the other 16 countries who will be participating in the delivery of these important services.

The U.S. strives to improve its space weather observing infrastructure and to maintain long-term continuity of essential observations. Launched on March 1, 2018, the next-generation NOAA geostationary meteorological spacecraft, GOES-17, will soon start providing operational space weather observations of the sun and the geostationary-orbit environment. And scheduled to launch later this year, the joint COSMIC-2 science mission will provide radio occultation data, on a full-and-open basis, to support both research and operations. NOAA is also pursuing a follow-on mission to ensure the continuity of solar wind and solar coronagraph measurements.

The year 2018 provided two first-time-ever events. Launched in January 25, 2018, on an Ariane 5 from French Guiana, GOLD is the first mission to study the day-to-day space weather of the upper atmosphere, the region with the largest impacts on spacecraft and communications. Launched on August 12, 2018, the Parker Solar Probe is the first mission to fly directly through the Sun's atmosphere, closer to the surface than any spacecraft before it. In doing so, Parker will help unlock the mysteries of how the solar wind is accelerated in order to better predict it. This year, the ICON mission is scheduled for launch. ICON is the first mission to focus on the interplay between terrestrial weather and space weather. In concert with GOLD, ICON will provide key observations to understand and predict the ionospheric variability that influences space weather.

Madame Chair, the U.S. looks forward to working with the Space Weather Expert Group and with all Member States to build upon our current work. Thank you, Madame Chair.

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