Statement by Kevin Conole, United States Representative, on Agenda Item 9: "Space-system-based Disaster Management Support," February 11, 2022

Thank you, Mr. Chair. The United States is pleased to provide our annual statement on the use of space-system-based support (from public, commercial, and new space ventures) for disaster risk management. Just last month, the National Oceanic and Atmospheric Administration (NOAA) announced that in 2021 the United States experienced twenty separate billion-dollar weather and climate disasters, which killed at least 688 people—the most disaster-related fatalities for the contiguous United States since 2011 and more than double last year's number of 262. Although the world's focus is on the coronavirus pandemic, it cannot be understated that there is a compounding impact from record-breaking flash floods, tropical cyclones, wildfires, volcanic eruptions, earthquakes, and landslides that has stricken already weakened communities, claimed countless lives, and disrupted lifelines around the world.

The United States makes significant contributions through international and intergovernmental bodies, including the UN, the Group on Earth Observations (GEO), the Committee on Earth Observation Satellites (CEOS), the Coordination Group for Meteorological Satellites, and implementing mechanisms, including the Paris Agreement and the Sendai Framework for Disaster Risk Reduction. This includes advancing the systems approach to Earth science and technology contributing effective practices and protocols in Global Risk Assessment.

The United States, represented by the U.S. Geological Survey (USGS) and NOAA, are pleased to continue our participation in the International Charter on Space and Major Disasters, which, over the last year, has proved again how such a data-sharing mechanism is a unique and invaluable approach to global cooperation in response to devastating events. Under the auspices of the Charter, the U.S. Government and the commercial sector provided numerous data and information products for more than 45 activations last year. In May of this year, NOAA and the USGS will jointly assume the role of Lead Agency for the Charter.

Mr. Chair, in the era of climate disasters, the value of Earth observations and global cooperation has never been more apparent. NASA innovates disaster risk reduction through a robust Applied Sciences Disasters program area, which harnesses Earth data, applied science and collaborative partnerships to improve response, hasten recovery, and promote resilience from disasters on local and

global scales. In 2021, the program expanded its efforts to utilize geospatial mapping for risk assessment, monitoring, and collaborating to act earlier and prevent loss. The NASA Disasters Program has also enhanced their partnership with UN-SPIDER since the signing of the NASA-UN Office for Outer Space Affairs (UNOOSA) Memorandum of Understanding MOU 14 months ago.

Regarding earthquakes, the USGS relies heavily on satellite radar and optical data obtained by UN Member States for earthquake disaster response. In 2021, the USGS used satellite data in response to earthquakes around the globe. Fault models derived from satellite imagery continue to be incorporated into the USGS ShakeMaps and related products to improve operational awareness following earthquake disasters.

Further, the United States recognizes the impacts of the climate crisis are being felt today in the disasters we are experiencing in the United States and around the world. In response, the President's Emergency Plan for Adaptation and Resilience (PREPARE) calls for NOAA and other U.S. agencies to support developing countries and communities in vulnerable situations around the world in their efforts to adapt to and manage the impacts of climate change. NOAA, a recognized leader in climate information and services, will work to build capacity by sharing its global data, resources, and tools, as well as provide direct technical assistance and capacity building to developing countries. By increasing access, use, and independent development of Earth observation and climate information, developing countries will be empowered to better understand and respond to climate hazards. One of the ways NOAA delivers that information is through the GEONETCast Americas network, delivering near real-time Earth observation data, via a low-cost, satellite-based, direct-broadcast service, to support decision makers across the Western Hemisphere with information for weather forecasting, drought prediction, wildfire detection and monitoring, early warning systems, and environmental monitoring.

Mr. Chair, the United States is committed to assisting in the effective management of disasters worldwide and the reduction of disaster risk to promote community resilience. In closing, I would like to express our appreciation for our many international partnerships that promote free and open sharing of critical data that will lead to greater utilization of space-based information for societal benefit. Thank you, Mr. Chair.

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