Statement by Kevin Conole, United States Representative, on Agenda Item 8: "Space-system-based Disaster Management Support," April 23, 2021

Thank you, Madame 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. [[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. When disasters threaten and strike, space-based perspectives and simulations are able to respond more safely, rapidly and efficiently. Technological progress continues to advance scientific research and increase access to critical data across disciplines and communities. We are improving the dissemination of information products and decision tools that are now recognized as essential.]]

Throughout 2020, innovations in space-based applications and the embrace of an all-community approach merged with frontier technologies in artificial intelligence, cloud computing, and visualization technologies continue to make substantial progress toward equalizing the playing field for underserved and under-resourced communities. New public-private partnerships formed across multiple sectors, including humanitarian and civil society groups, economics and finance, transportation and energy, ensuring more co-developed solutions with communities to translate knowledge into sustainable and cultural practice.

The United States makes significant contributions through international and intergovernmental bodies, including the Group on Earth Observations (GEO), and implementing mechanisms, including 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 U.S. remains committed to aligning our efforts with the campaign to advance the Sendai Framework targets, which in 2020 targeted developing national and local strategies.

Understanding that disasters know no borders and have transboundary consequences and solutions, the U.S. emphasizes regional partnerships. To this end, the U.S. continues to create and strengthen key relationships through the UN,

GEO, CEOS, and the Coordination Group for Meteorological Satellites (CGMS), reaching out to strengthen the quality of data and information among diverse stakeholder communities. Institutions from media and engineering sectors, insurance and security, academic and public bound together thru innovative and new virtual partnerships to deliver a wide array of data and analyses when and wherever needed.

NASA innovates through a robust DISASTERS Program, which harnesses science, and they found in 2020 that transformative disaster risk reduction could be demonstrated by collaborating to act earlier. The U.S., represented by the 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 disaster response throughout the year, including to support a prolonged 6-week activation for a major eruption of the Merapi Volcano in Indonesia and an activation for the Taal Volcano in the Philippines, where Landsat was used to detect lava flows.

Regarding earthquakes, the USGS relies heavily on satellite radar data obtained by UN member states for event response such as for the January 2020 Puerto Rico earthquake, as well as event response for numerous international earthquakes, including a recent March 2021 earthquake sequence in Greece. Fault models derived from the radar imagery were incorporated into the USGS ShakeMap and related products.

NOAA and its partners in the Americas continued 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. In 2020, NOAA increased the bandwidth of GEONETCast Americas to allow even more data, products, and services to be made available to the more than 100 GEONETCast Americas stations. In addition, in 2020, NOAA and USGS joined AmeriGEO in launching the InterAmerican Academy of Geosciences and Applications, an online portal of tools and training opportunities to aid regional

users and decision makers in using Earth observations to make decisions and advance sustainability in the region.

The United States is committed to assisting in the effective management of disasters worldwide and the reduction of disaster risk to promote community resilience through science knowledge, predictions, simulations, and intelligent solutions. 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, Madame Chair.