Statement by Kevin Conole, United States Representative, on Agenda Item 6, "Matters Related to Remote Sensing of the Earth by Satellite, Including Applications for Developing Countries and Monitoring of the Earth's Environment" -- April 27, 2021

Thank you, Madame Chair. The United States is committed to maintaining space as a stable and productive environment for the peaceful uses of all nations, including the uses of space-based observation and monitoring of the Earth's environment. The U.S. civil space agencies partner together to achieve this goal. NASA continues to operate numerous satellites focused on the science of Earth's surface and interior, water and energy cycles, and climate. NOAA operates polar-orbiting, geostationary, and deep space terrestrial and space weather satellites. USGS operates the Landsat series of land imaging satellites, extending Landsat's nearly 50-year history of –recording the Earth's surface and serving a variety of public uses. This constellation of research and operational satellites provides the world with high quality, sustained observations of our Earth's, lands, interior, oceans, and atmosphere.

Madame Chair, throughout the last year, NASA expanded the use of Earth observations of basic and applied research. 2020 culminated with the launch of the Sentinel-6 Michael Freilich spacecraft on November 10th. As a historic U.S.-European partnership, the Sentinel-6 Michael Freilich spacecraft will begin a five-and-a-half-year prime mission to collect the most accurate data yet on global sea levels and on how our oceans are rising in response to climate change. The mission will also collect precise data of atmospheric temperature and humidity that will help improve weather forecasts and climate models. The spacecraft is named after Dr. Michael Freilich, the former director of NASA's Earth Science Division, and a tireless advocate for advancing satellite measurements of the ocean. The mission builds on the heritage of the European Space Agency Copernicus Sentinel-3 mission, as well as the heritage and legacy of the U.S.-European TOPEX/Poseidon and Jason-1, 2, and 3 series of sea level observation satellites.

NOAA and NASA, along with our European partners, continue to study the oceans with the Jason-3 mission. NOAA continues to operate GOES-East and GOES-West to provide high-resolution visible and infrared imagery as well as lightning observations of more than half the globe. Together with NOAA-20, the GOES satellites provide decision makers and the public with 24/7 access to highly accurate, high resolution observations critical for improved weather predictions and environmental monitoring.

The USGS, NASA, and NOAA continue to develop and deploy new satellite-based drought monitoring systems to support the U.S. Agency for International Development's Famine Early Warning Systems Network and the GEOGLAM Crop Monitor for Early Warning. COVID-19 exacerbated extreme food insecurity that now impacts more than 110 million people, 25 percent more than prior to COVID-19. Ever-improving integrated monitoring and forecasting systems help identify the most vulnerable at-risk populations, guiding timely and effective humanitarian assistance.

NASA, the European Space Agency, and the Japan Aerospace Exploration Agency co-developed a COVID-19 Dashboard that features data collected by NASA and other agency satellites, instruments aboard the International Space Station, and sensitive ground-based networks. NASA Harvest also released a COVID-19 Dashboard for Agriculture to help quantify the pandemic's impact on agricultural production and food security around the world.

NASA and USAID continue to partner with leading technical organizations around the world to strengthen the capacity of partners in more than 50 countries, using satellite data to improve development outcomes, resilience, and self-reliance. SERVIR has active hubs in eastern and southern Africa, West Africa, the Hindu-Kush Himalaya, lower Mekong, and the Amazonia regions. SERVIR demanddriven geospatial services use Earth observations to support decision making and resilient development in agriculture and food security, land cover land use change and ecosystems, water and water-related disasters, and weather and climate.

Similarly, since 2011, USGS and USAID have partnered to implement the U.S. Government SilvaCarbon program, which aims to transfer technical capacity to 23 countries in the use of satellite data to monitor deforestation and forest degradation to manage their lands to achieve sustainable development goals.

Landsat satellites continue to add approximately 50 million square kilometers of land observations daily. In 2020, the USGS distributed more than 15 million Landsat products to users around the globe. USGS operates the Landsat 7 and Landsat 8 satellites, both of which enable international cooperators to receive direct downlinks of imagery for their location. The Landsat 9 mission is scheduled to launch in September of this year. A follow-on mission, Landsat Next, is now in pre-formulation with NASA. Madame Chair, the United States will continue to lead collaboration with the international community to ensure comprehensive, coordinated, and sustained Earth observation capabilities for the benefit of humankind. Thank you, Madame Chair.