

**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” -- February 8, 2023**

Thank you, 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 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. The National Oceanic and Atmospheric Administration (NOAA) operates polar-orbiting, geostationary, and deep space terrestrial and space weather satellites. The United States Geological Survey (USGS) operates the Landsat series of land-imaging satellites, which celebrated its 50-year anniversary of observing the Earth, establishing a robust time-series to study climate change. This constellation of research and operational satellites provides the world with high quality, sustained observations of our Earth’s lands, interior, oceans, and atmosphere.

Chair, during the last year, NASA launched its newest Earth Science instrument to the International Space Station -- the Earth Surface Mineral Dust Source Investigation, or EMIT, which is providing information about how mineral dust affects the heating and cooling of the planet and which has a capability to detect methane. Among the many other NASA Earth Science missions, in December, with the French Space Agency, as well as the Canadian and UK Space Agencies, NASA launched the the Surface Water Ocean Topography mission, which will provide a global survey of nearly all water on Earth’s surface, providing insight into the ocean’s role in how climate change unfolds.

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. NOAA’s GOES-T satellite launched on March 1, 2022, was renamed GOES-18 upon reaching geostationary orbit, and put into operational service as GOES West on January 4, 2023. In addition, NOAA launched the second of their Joint Polar Satellite System satellites – JPSS-2 - on November 10, 2022, and once it reached orbit it was officially renamed NOAA-21. In addition, NOAA and NASA, along with our European partners, continue to study the oceans with the Sentinel missions. Together with data from NOAA’s global partners, NOAA’s

geostationary, low-Earth orbiting, and deep space satellites provide decision makers and the public with 24/7 secure and timely access to global environmental data and information to promote and protect the environment, economy, and quality of life.

NOAA continues to work with our partners across the Western Hemisphere to support GEONETCast Americas, a user-driven, user-friendly and low-cost information dissemination service aims to provide global information as a basis for sound decision-making.

The USGS and U.S. Agency for International Development partner to implement the U.S. Government's SilvaCarbon program, which aims to transfer technical capacity to 26 countries in the use of satellite data to monitor deforestation and forest degradation to manage their lands to achieve their commitments to the Paris agreement. In 2022, SilvaCarbon hosted or supported workshops in Vietnam, Fiji, Paraguay, and the U.S., and introduced training webinars targeted to Latin America, Southeast Asia, Central Africa and the Pacific Island regions.

The USGS, in collaboration with university partners, is researching and implementing processes to improve earlier yield forecasts based on subseasonal climate forecasts, Earth observations and Machine Learning techniques, and to convert long-term climate forecasts into long-term crop condition forecasts, including countries that do not have sufficient agricultural statistics. Ever-improving integrated monitoring and forecasting systems help identify the most vulnerable at-risk populations, guiding timely and effective humanitarian assistance.

In 2022, Landsat satellites continued to add approximately 60 million square kilometers of land observations daily. Landsat data continue to be freely accessible via the traditional USGS search and discovery tools and are now also directly accessible in the cloud. Landsat's International Cooperators are continuing to receive direct downlinks of imagery at their national ground stations from Landsats 8 and 9, enabling regional access and near real-time exploitation of Landsat observations. The joint agency team of NASA and the USGS have announced that a follow-on mission, Landsat Next, has been approved to move into formulation with a 3-satellite 'Triplets' architecture which provides improved spectral, spatial and temporal resolution. Thank you, Chair.