**STATEMENT**

**TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE**

**SBSTA 47/COP 23 06-xx/11/2017**

The European Commission, on behalf of the Committee on Earth Observation Satellites (CEOS), is pleased to update the 47th session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) on the coordinated response to the United Nations Framework Convention on Climate Change (UNFCCC) needs for global observations being implemented by CEOS and the Coordination Group for Meteorological Satellites (CGMS) Working Group on Climate.

CEOS and CGMS, international organizations of 60 Members and Associates and 15 Members, respectively, have had the honor to report on Space agency activities to the UNFCCC on several previous occasions.

Space agencies continue to evolve their systematic observation of the climate system, now over several decades, strengthening scientific knowledge on climate, supporting provision of knowledge-based information to climate services and to support decision making. Space agencies are doing this by implementing the Strategy Towards an Architecture for Climate Monitoring from Space, 2013 – developed by a team comprised of representatives from CEOS, CGMS, and the World Meteorological Organization (WMO). This architecture involves the identification of existing and potential future gaps in the provision of the climate data requested by the UN’s Global Climate Observing System Programme (GCOS).

The consolidation of space agency efforts through the establishment of the joint CEOS/CGMS Working Group on Climate has resulted in a significant increase in efficiency in responding to the needs of Systematic Observations as required by the Convention. This is manifested in part by considerable increase in the quantity of climate data records (factor 3) submitted by agencies to the Essential Climate Variable (ECV) Inventory with respect to the first exercise implemented in 2015.

The synergistic relationship with the UN’s GCOS Programme continues to strengthen. Here, CEOS and CGMS present a response to the 2016 GCOS Implementation Plan reiterating their commitment to address the Actions required for the implementation of the global observation system for climate.

CEOS and CGMS Agencies have dedicated considerable efforts in recent years to the concerted analysis and development of innovative approaches to data structures and interfaces. These interfaces will, in particular, enable users interested in looking at climate adaptation issues at actionable scales to make a better use of long-term Earth observation datasets.

Space agencies have been active in the UNFCCC context via SBSTA and have organized a coordinated response -- to the decisions in Paris at COP-21. They recognize that high quality greenhouse gas information will be essential to track progress toward the achievement of Nationally Determined Contributions (NDCs) and for stocktaking, and recognize a fundamental role for this information, integrated with ground based measurements and models in supporting a Monitoring and Verification System and the transparency framework. In this context, over the last year, Space agencies in CEOS and CGMS have started an activity to define a strategic architecture to meet the requirement of such a system, taking advantage of the competence of the current Virtual Constellation on Atmospheric Composition. This will build on the remarkable technical advancements shown by the several satellites already in operation which have accumulated synoptic greenhouse gas information for more than 8 years. Further to this, the advances made by the European Union in establishing its operational Earth Observation and Monitoring programme including both an Atmosphere and a Climate Change service should also be noted. These efforts fit into the broader context of the comprehensive CEOS Strategy for Carbon Observations from Space, which is pursuing additional relevant activities to better constrain the natural background carbon fluxes. In addition, Space agencies are actively engaging the refinement process of the IPCC TFI guidelines. This would ensure that space-based observations are appropriately represented as a significant contribution to the reporting process.

Finally, also on mitigation, CEOS continues to support the Global Forest Observations Initiative implementing the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation or REDD+.