GROUP on EARTH OBSERVATIONS
MEXICO CITY MINISTERIAL SUMMIT (13 November 2015)

Statement by the United Nations Environment Programme (UNEP)

Mr Chairman, Ministers, Colleagues,

Almost two years ago at the Geneva Ministerial the UNEP Executive Director launched UNEP-Live, an innovative and open platform of environmental information designed for global, regional and national data sharing and assessment. The launch of UNEP-Live marked an important milestone for UNEP, since it has represented a first concrete and pragmatic step taken by our organization to support Countries and the international community in generating, accessing, analyzing use and communicate environmental knowledge through an open platform.

In September, more than 150 world leaders adopted the new 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs). More than half of the SDGs have a direct environmental focus or address the sustainability of natural resources: poverty, health, food and agriculture, water and sanitation, human settlements, energy, climate change, sustainable consumption and production, oceans, and terrestrial ecosystems.

Now, as a final step in establishing this new global framework, the Inter-Agency Expert Group of member states is finalising the list of indicators that will set the stage for a universal programme of measurement, statistics and review. A number of these indicators will be based on remote sensing data and UNEP looks forward to working with the GEO community to ensure that countries have access to the relevant data flows to be able to undertake regular indicator based assessments and to report on progress.

UNEP is supporting policy and decision making through national to global assessment processes, such the Global Environment Outlook or GEO and the organization of biennial Regional Environmental Information Networking (REIN) conferences. UNEP Live teams are currently helping to build National Reporting Systems in more than 102 countries so that government ministries and the public can have access to key data flows coming from recognised sources, including earth observation and the wider monitoring and observing community.

These and other data on emerging issues, plus big data and unstructured information from social media, will be integrated into the UN-System Data Catalogue, supported by a new SDG Interface Ontology, which allow a full interoperability between data and information from different sources unreceptive of languages and structures. This has been launched on the UNEP Live platform together with a new web intelligence system that searches the world of unstructured data using semantic parsing for all UN languages, linking what is being said in the news, social media, scientific literature and public government documents to trends and impacts across the world.

Legislation for open access to data is a key driver in this process; to date more than half the world's countries has this in place or on its way. The roll-out of National Reporting Systems by UNEP aims at delivering open access based on the principles of SEIS (Shared

Environmental information System) that help countries avoid duplication in data collection; streamline data capture, collect data once to then use many times; maintain data at source; and put in place quality assurance. Open access will not only enable government ministries to develop more integrated sustainable development policies, but also to open up opportunities for scientific institutions to contribute to the basis upon which decisions are made. Even more crucial is making information accessible to the public - a crucial aspect of reporting on the state of the environment, such as ambient air quality, where people need to be informed for the sake of their health.

Wherever UNEP and the indeed the whole UN is working, the essential role of Earth observations and related information derived both from space, airborne, land and marine networks, is clear. Today, in recognition of the importance of this type of information that is both up-to-date and geo-located, we are launching two new near-real-time data flows in UNEP Live – mean sea-level rise and Antarctic ozone hole.

The Antarctic ozone hole is monitored using ground instruments, balloons and satellites. The graphs show the general increase in area and depth of the ozone hole from 1979 until its peak in September 2006 in area. At the same time, the abundance of ozone depleting substances is continuing to decrease slowly after peaking around 2000. This year, due to unusually cold temperature and weak dynamics in the Antarctic stratosphere, the depletion was severe and the hole was the largest recorded since 2006 and the fourth largest on record based on area (million km^2). In 2015, the vortex has been relatively stable and concentric around the South Pole, due to unusually cold temperature and weak dynamics in the Antarctic stratosphere, which can explain the late onset of ozone depletion. The comparatively large area of the vortex can explain the relatively large area of the ozone hole this year.

The Mean Sea Level graph shows an overall average increase in global mean sea level between 1993 and 2016. The global mean sea level change as of August 2016 is 80.83mm. However, sea level changes and thus the potential impacts, vary substantially from the global average between different regions of the world. This is largely due to factors including, dynamic ocean processes, ocean floor movement, and a change of water mass properties caused by changes in winds and air pressure, air–sea heat and freshwater fluxes. Regional mean sea level trends show that areas such as the Western Pacific will experience much greater increases than the global mean. UNEP's GEO SIDS report presents the environmental outlook for the Small Island Developing States (SIDS) and the socio-economic effects.

In full accordance with the GEOSS data sharing principle, UNEP is committed to disseminate and to make fully accessible data and information generated through its programme or contributed by its partners as widely as possible. UNEP Live and the National Reporting System are key components of the overall GEOSS architecture through which countries and citizens can gain simple access to Earth observations data and related information relevant for policy processes and decision-making.

UNEP is committed to working with partners in the framework of the Global Earth Observation System of Systems. A working group including staff from the Group on Earth Observations Secretariat, UNEP/GRID-Geneva and from Research Council of Italy has been recently established with a task to identify critical datasets sensed by in situ or satellite sensors, and to share them with the global community through dedicated web-

services published in UNEP-Live for large dissemination.

UNEP has a long standing history as participating organization in the Group on Earth Observations and, in this capacity, is taking very seriously the commitment to advance the GEO Principles and to fully implement an open, inclusive and groundbreaking Global Earth Observation System of Systems or GEOSS.

Mr Chairman.
UNEP's active participation and contributions to the implementation of the first 10 years of the Group on Earth Observations will be renewed and strengthened in the upcoming new GEO strategic plan 2016-2025: Implementing GEOSS.

UNEP remains firmly convinced of the critical importance of GEOSS as comprehensive, coordinated and sustained mechanism for the observations of the Earth and its contribution towards a better monitoring of the state of the environment, increasing understanding of Earth processes, and enhancing predictability of Earth system behavior.