

**WMO OMM**

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Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
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WMO Statement

Agenda Item 4. UNISPACE+50 high-level segment (to be delivered on 21 June 2018)

(Check against delivery)

Madam Chair,

Distinguished Delegates,

The World Meteorological Organization (WMO), a specialized agency of the United Nations with 191 Member States and Territories, dedicated to international cooperation and coordination on issues related to weather, water and climate, is very pleased to join the members of the Committee on the Peaceful Uses of Outer Space to celebrate the 50th anniversary of the first United Nations Conference on the Exploration and the Peaceful Uses of Outer Space and 50 years of space achievements.

WMO has contributed to the work of the Committee starting from its very beginnings.

In 1961, in response to a request by the Committee and by the General Assembly, WMO prepared a report which proposed a global programme to advance atmospheric science research and to develop improved weather forecasting capabilities using space technology.^{1,2}

¹ General Assembly resolution 1721 (XVI) C, http://www.unoosa.org/pdf/gares/ARES_16_1721E.pdf.

² See <https://public.wmo.int/en/bulletin/global-satellite-observing-system-success-story>.

The report was subsequently considered by the Committee and as a result, in 1963, the General Assembly endorsed the efforts towards the establishment of such a global programme under the name World Weather Watch (WWW) under the auspices of WMO.³

In 1968, at the first UNISPACE Conference, a dedicated thematic session was organized at the Conference to review the advances made in meteorological satellites and WMO could already report several World Weather Watch achievements.

For example, the first low Earth orbiting weather satellites had already been launched in the early 1960s and were complemented in 1966 by the first Geostationary satellite with experiments to collect weather data and to provide data-relay and re-transmission to end-users using a Weather Facsimile (WEFAX) service.⁴

In 1968, weather satellites were still mainly providing cloud images to support weather forecasts, but the potential benefits of satellite data for numerical weather prediction were already noted, including the use of satellite data for climatology and the refinement of atmospheric models.

In its conclusions, the Conference recognized the value of meteorological observations from space and the substantial economic benefits of improved weather forecasting and called upon the United Nations and its Members to support the further development of the World Weather Watch.

Madam Chair,

From its early stages, the World Weather Watch has evolved into a well-planned system of meteorological and environmental satellites, integrated with in-situ based observation networks and supporting a wide range of WMO application programmes, coordinated and managed under the framework of the WMO Integrated Global Observing System (WIGOS).

The space-based component of WIGOS is supported by a the WMO Space Programme, which was established in 2003, taking account of the growing contribution of satellites to WMO application programmes. The WMO Space Programme is conducted in partnership with space agencies of WMO Members and their coordination bodies, the Coordination Group for Meteorological

³ General Assembly resolution 1963 (XVIII) III, http://www.unoosa.org/pdf/gares/ARES_18_1963E.pdf.

⁴ LEO: TIROS-1 (1960), GEO: ATS-1 (1966).

Satellites (CGMS) and the Committee on Earth Observation Satellites (CEOS), and acts as a bridge between satellite operators and users, with a focus on four main components:

1. Coordinating the space-based component of the WMO Integrated Global Observing Systems
2. Ensuring the wide availability, accessibility and utilization of satellite data and products for weather, space weather, climate and water applications;
3. Supporting capacity building, education and training through the WMO Virtual Laboratory, in particular also in the developing countries;
4. Coordinating space-based Space Weather observations.

The WWW system continues to evolve and is one of the best examples of sharing space benefits for the benefit of all humankind.

New meteorological and environmental satellites are launched nearly every other month and join the global observing system. The majority of the data derived from these systems is provided under open data policies and standards, disseminated through a range of affordable and easily accessible communication networks, coordinated under the framework of the WMO Information System (WIS).

Several terabytes of Earth Observation data per day are generated and made available to users world-wide to support individual and institutional users, societies, economies and policy- and decision making in support of implementing global development goals.

The 18th World Meteorological Congress to be held in 2019, is expected to approve the WIGOS Vision 2040 which defines the global space and in-situ based observation network that we plan to have in place in space by the year 2040.

The WMO Space Programme is supporting this effort through processes that ensure that the future space-based system is linked to evolving user requirements.

Madam Chair,
Distinguished delegates,

The space community has come a long way in realizing many of the space applications that the Committee on the Peaceful Uses listed in the initial report it had prepared at its ad-hoc meeting, in 1958.⁵ It has also largely delivered on the expectations expressed by participants at UNISPACE 50 years ago.

Today's event is an opportunity to look back and to celebrate past achievements, but it is also an appropriate moment to consider the new challenges we are facing, and what still needs to be accomplished in the field space activities in the decades ahead.

Despite the fact that our observation systems are becoming better, many of the benefits that in principle can be derived from space-based information are still not reaching the people and in particular especially those that need it most.

One can have the best possible space-based observation system and it will nevertheless be useless if the data it creates is not being used to inform sound policy- and decision making.

We have heard in many statements that space can contribute to measuring and achieving many of the Sustainable Development Goals. In reality, presently not one of the SDGs can be measured operationally using space-based data. When we categorize the SDGs indicators by their social, economic and environmental dimension, it is the environmental indicators where the least amount of data and information is available.⁶

You will surely agree that the proposed Space2030 Agenda should contain concrete steps to change this situation.

If in 2030 we aspire to claim that space technology and applications have contributed to the implementation of the 2030 Agenda, we will have to multiply our efforts to extract useful, actionable information from the enormous amount of data our satellites are collecting.

To contribute to this is also the focus of the WMO Space Programme.

Madam Chair,
Distinguished Delegates,

⁵ See http://www.unoosa.org/pdf/gadocs/A_7285E.pdf.

⁶ See, for example, "Measuring SDG progress in Asia and the Pacific: Is there enough data?", Statistical Yearbook for Asia and the Pacific 2017, ST/ESCAP/2825, 2017.

The World Meteorological Congress in 2019 will review the vision of WMO, its structure and its programmes, to respond to new developments and to continue meeting the needs of WMO members in the years to come.

In these considerations, the space-based observation system and its future evolution will remain an essential and central component of WMO activities.

WMO, through its space programme, will ensure that the World Weather Watch created through discussions in this Committee will continue to expand and be a source of information for improving people's lives through integration into the wider framework of WIGOS.

WMO also remains fully committed to work in close cooperation with the Committee on the Peaceful Uses of Outer Space.

Before I conclude, I would also like to take the opportunity, on behalf of WMO, to congratulate Madam Chair for your election and to thank the previous Chair, Dr. David Kendall and my UNOOSA colleagues for the excellent work in preparing this session of the Committee.

Thank you very much for your attention.