

#### **Item 4: General Exchange of Views**

Madam Chair,

On behalf of the German delegation I would like to congratulate Ms. Natália Archinard on her election as Chair of this Subcommittee and assure her of our support. We also thank Ms. Pontsho Maruping for her excellent leadership throughout the last two sessions of the Scientific and technical Subcommittee.

We would also like to extend our sincere appreciation to the Office of Outer Space Affairs led by Ms. Simonetta Di Pippo for their outstanding work in preparation of this year's meeting.

Madam Chair, distinguished Delegates,

Space technology is a valuable tool for the benefits of humankind and the achievement of the Sustainable Development Goals. It has become an indispensable element of public infrastructure - we must work with combined efforts to increase the benefits and preserve space for future generations. Germany believes that a multilateral approach is fundamental to achieving our objectives and we welcome the increasing membership of COPUOS which demonstrates in our view the importance of preserving space for the benefit of all people.

With that goal in mind, last year, a major breakthrough was achieved on the long-term sustainability of outer space activities. We have reached agreement on 21 guidelines and the preamble that was worked out by this Committee as well as on a process to continue the work on LTS. Germany welcomes this important achievement as it demonstrates the essential role of the Committee in enhancing the sustainable use of outer space.

We agreed to establish a new working group on LTS and will now have to work out its terms of reference. Germany is firmly committed to contribute to this process, as preserving the long-term sustainability of outer space activities is in our most fundamental interest.

Another major topic at this session will be to continue to shape the "Space2030" agenda and its implementation plan. Germany is looking forward to actively participating in the "Working Group on the Space2030 agenda" and we would like to commend the bureau of the working group supported by the secretariat for their excellent leadership displayed during

the previous meetings. It is a matter of great importance for COPUOS and its two subcommittees that the Space2030 agenda will become a meaningful instrument for raising awareness on strengthening the contributions of space as a driver for sustainable development and the importance of global space governance.

Madam Chair, distinguished Delegates,

International collaboration opens up synergies, which are important for maximum mission success, in particular in the field of space science and exploration. We are therefore pleased to work closely together with many different partners around the world. During the past year, we have witnessed extraordinary international scientific and technical accomplishments. Let me highlight some of them.

In December 2019, the ESA CHaracterising ExOPlanets Satellite CHEOPS space telescope was launched into orbit. The mission will further extend the search for planets outside of our solar system, and provide key insight into the nature of these distant worlds. With the participation of the German Aerospace Center (DLR), CHEOPS will determine the radii and densities of a large number of exoplanets and investigate which of them might have an atmosphere.

The Spektrum-Röntgen-Gamma (SRG) spacecraft with the German X-ray telescope eROSITA, built by Max Planck Institute, and its Russian partner instrument ART-XC was launched in July 2019 towards its destination – the Lagrange-point L2 of the Sun-Earth system. The space telescope will observe the entire sky and search for hot sources such as galaxy clusters, active black holes or supernova remnants. With its enhanced capabilities, the joint mission will help researchers gain a better understanding of the structure of the Universe.

DLR's Heat Flow and Physical Properties Package (HP<sup>3</sup>) was placed on the Martian surface by the NASA InSight mission's robotic arm. The instrument has been activated in 2019 and measures the thermal conductivity of the Martian regolith and the heat flow from the interior of the planet.

Already in January 2019, the Chinese Chang'e-4 mission released the second 'Jade Rabbit' at the far side of the moon. Among others, the landing probe carried a measuring instrument from Germany: the Lunar Lander Neutron and Dosimetry Experiment (LND) provided by the University of Kiel. The lander gathers information about the radiation environment on the surface of the Moon and will help to investigate the radiation levels that future astronauts might be exposed to.

Madam Chair, distinguished Delegates,

In November 2019, Spain hosted the Ministerial Council Meeting of the European Space Agency in Seville. Financial and strategic decisions have been taken on existing as well as on new programmes. This includes Europe's participation in international exploration. For example, Europe will contribute with the European Service Module to Lunar Gateway missions. The Member States also strengthened their commitment to Earth observation and application programmes. New remarkable programmes - like the asteroid mission Hera and the Active Debris Removal mission ADRIOS - help to preserve and protect outer space for the use by future generations. Through its investments, Germany significantly contributes to these and other programmes.

Within its National space program, Germany has placed a strong emphasis on measuring its projects according to their contribution to social, economic and scientific objectives:

- For example, with the global TanDEM-X Forest Map, DLR has created a special dataset to monitor, assess, and protect the current state and development of the earth's forests with precision.
- In addition to generating data and information useful for sustainable socioeconomic development, we must also increase the capacity of people and institutions to make best use of them. In the scope of the "EO College" portal, DLR has partnered with ESA to make educational material available in the form of online tutorials and massive open online courses.

To broaden and extend the benefits of space, Germany will continue to support international efforts such as:

- UN-SPIDER,
- the International Charter on Space and Major Disasters,
- or the Committee on Earth Observation Satellites (CEOS).

In this context, UN-SPIDER has brought together experts for a three-day international conference in November 2019 in Bonn, supported by DLR and the University of Bonn, to discuss the increased use of big data approaches and satellite technologies in African countries to respond to challenges posed by natural hazards.

Germany is also strengthening its space-related research and technology development activities to tackle growing challenges in the areas of sustainable development, climate change and humanitarian relief, among others. This occurs in close cooperation with end-user of these

technologies, such as the World Food Programme, the United Nations Development Programme as well as UNOOSA and UN-SPIDER.

Madam Chair,

Let me conclude by reiterating the importance Germany attaches to strengthening the role of the Committee and UNOOSA as a unique platform for international cooperation in the peaceful uses of outer space and in space activities.

We thank you for your kind attention.