Germany, Item 8

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Agenda Item 8: Space and sustainable development

Statement by Germany

Mr. Chairman, distinguished delegates,

Germany continues to be strongly committed to promoting sustainable development through international cooperation in space activities. Let me highlight some examples:

- Germany continuously contributes to the International Charter 'Space and Major Disasters'. In 2020, the Charter was activated for more than 50 disasters worldwide and has reached the 700th activation in early 2021. During the last year, the German Aerospace Center, DLR, provided more than 200 TerraSAR-X and TanDEM-X radar satellite images as well as numerous RapidEye image tiles to the operations of the Charter to support emergency response related to several flood disasters during the strong Asian monsoon season and a large number of hurricanes and typhoons experienced in 2020.

- We see from experience that international collaboration is also key in achieving space-based emergency mapping more effectively and in mitigating risks resulting from climate change. Germany clearly commits itself to a **multilateral approach in disaster and climate change management** and reiterates its support of the use of space data for a better understanding of climate change. We thank the Austrian delegation for introducing the 'Space4Climate Action' initiative. With climate change becoming an ever more important issue, we are interested to learn more about this initiative and to engage in further discussions on this topic.

- In the same spirit, the German government renewed its commitment to the **UN-SPIDER** program and its office in Bonn. Through the SPEAR project, UN-SPIDER and the University of Bonn develop Earth-observation tools and methods for disaster management and conduct capacity-building activities for a wide range of countries. We are glad to see that these efforts continue despite the ongoing

pandemic and we look forward to the virtual international conference on space-based solutions for disaster management in Africa, to be held in November 2021.

- Germany is also pleased to announce that the city of Bonn was chosen as venue for the “ESA Living Planet Symposium 2022”.

- For the use of space-based data and applications for socioeconomic development, especially developing countries can benefit from access to open data and software to process such data. In a joint announcement, DLR and the Spanish National Institute of Aerospace Technology, invited the scientific community in May 2021 to further explore the scientific benefits of the TerraSAR-X, TanDEM-X and PAZ constellations with the objective to promote the scientific use of the experimental-campaign data.

  TanDEM-X data was also used to evaluate the alpine glacial melting in a study by the German Friedrich-Alexander-University Erlangen-Nuremberg. Combined with data derived from the German-U.S. Shuttle-Radar Topography Mission and optical data of the NASA Landsat-Satellites, a reduction of 17% of the alpine ice volume since the last century could be measured.

  Germany continues to use radar missions for climate change measurement. At European level, German institutions will have an active role within the ROSE-L “High Priority Candidate Mission” under the EU/ESA Copernicus Programme.

- Germany is committed to implementing the SDGs on multiple levels. Under the “**SDGs@DLR** initiative”, the German Aerospace Center **intensifies scientific and technological cooperation for sustainable development**. In cooperation with the German Development Agency GIZ the use of earth observation data is promoted, for example, for the measurement of selected SDGs in Namibia, for integrated ecological regional planning in the Aral Sea region in Central Asia and for water resource management in Ruanda.

- Already in 2019, Germany launched an initiative to make space technologies usable for **humanitarian aid** and systematically develop them further.

Several projects in this respect have now begun **transferring technology from space robotics to support the World Food Programme** (WFP):

- The “MEPA project”, provides means of producing fresh food in emergency situations. The three plant cultivation systems do not require soil, are reusable, and enable rapid production, with the first harvest after just four to six weeks.

- In a similar vein, the project “FamPred” uses machine learning based on climate and weather data to predict famine catastrophes and the project “AHEAD” which stands for Autonomous Humanitarian Emergency Aid Devices will support the WFP to safely transport aid supplies on remote controlled trucks.

Germany is looking forward to further strengthening the sustainable use of outer space and utilizing space for sustainable development in the years ahead.

Thank you for your kind attention.