

UNCOPUOS Scientific and Technical Subcommittee60th Session, Vienna/Online, 6-17 February 2022

Statement by Germany on

Agenda item 8: Space-system-based disaster management support

Mr. Chair, distinguished delegates,

Germany, often in cooperation with European or international partners, conducts a range of scientific and operational activities in the field of Earth observation that serve the purpose of disaster and risk management and humanitarian relief support. I would like to highlight some of these activities.

Germany contributes to the International Charter 'Space and Major Disasters', which was activated for 50 disasters worldwide in 2022. The German Aerospace Center, DLR, supported these activations by providing more than 130 TerraSAR-X and TanDEM-X radar satellite images to the operations of the Charter and by supplying emergency on-call-officers for these activations. The data provided was used to support emergency response activities related to several flood disasters, tropical storms and volcanic eruptions experienced in 2022.

The new German hyperspectral satellite EnMAP has successfully been launched in April 2022 and since November started its routine operation phase. The satellite with its high number of very narrow spectral bands will help monitor environmental risks such as risks to water quality or to the health of vegetation. Its suitability for disaster management support is currently being investigated in the context of the Charter.

The DLR Center for Satellite Based Crisis Information in cooperation with the German Federal Foreign Office in 2022 supported institutions in Chad

as well as UN bodies with data products about flood duration in southern and central Chad between July and October when serious flooding events occurred. In the same way, the historic floods after heavy monsoon rainfall since mid-June in Pakistan were monitored. In cooperation with the World Bank, the German Remote Sensing Data Center (DFD) analyzed their World Settlement Footprint dataset to identify critical developments and better prepare cities for natural hazards. The Geoservice of DLR's Earth Observation Center (EOC) since April 2022 provides new products with daily, monthly and yearly coverage on the basis of Copernicus Sentinel-3 Satellite for Burn Scar Monitoring over Europe to provide both an immediate overview of the current situation as well as time series analyses.

Mr. Chair, distinguished delegates,

Germany remains committed to a multilateral approach in disaster and climate change management and strongly supports efforts to promote international collaboration in that regard.

Through the SPEAR project, a collaboration between UN-SPIDER and the University of Bonn, capacity-building activities in space-based disaster management have been conducted in 2022 that have included experts from a wide range of countries. In September, the University of Bonn supported a UN-SPIDER Technical Advisory Mission to Nigeria which included the co-organization of a three-day interinstitutional workshop on the use of space-based information for flood response and early warning. The SPEAR project is running until the summer of 2024, and we are currently looking towards renewing this partnership in order to continue Germany's support for the UN-SPIDER programme and for scientific activities in space-based disaster management.

Finally, we would like to highlight the VALE project, in which the United Nations University's Institute for Environment and Human Security together with the German company Mundialis developed satellite-based tools to calculate certain indicator values for flood hazard mapping in Ecuador, as

defined by the Sendai Framework for Disaster Risk Reduction. The methodology was picked up the Earth Observation Risk Toolkit, a collaboration between UNDRR, the Group on Earth Observations GEO, and ESRI.

Mr. Chair, distinguished delegates,

thank you for your kind attention.