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Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee Fifty-eighth session Vienna, 19–30 April 2021

## Draft report

## VI. Space-system-based disaster management support

- 1. In accordance with General Assembly resolution 75/92, the Subcommittee considered agenda item 8, entitled "Space-system-based disaster management support".
- 2. The representatives of Algeria, Canada, Colombia, China, Cuba, France, Germany, India, Indonesia, Israel, Japan, Mexico, Peru, the Russian Federation, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 8. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 3. The Subcommittee heard the following scientific and technical presentation: "Integrating indigenous knowledge and state-of-the-art Earth observation solutions for the Sendai Framework implementation", by the observer for CANEUS International.
- 4. The Subcommittee had before it a report on activities carried out in 2020 in the framework of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (A/AC.105/1239).
- 5. The Subcommittee noted with satisfaction the progress achieved through activities held in 2020 in the framework of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) and the continuing advisory and other support provided through UN-SPIDER to emergency response efforts.
- 6. The Subcommittee noted that, with the continued support of its network of partners, representatives of UN-SPIDER had carried out the following activities: (a) a technical advisory mission to Tunisia; (b) virtual support to several countries in Africa, Asia, and Latin America and the Caribbean; and (c) employment of short-term consultants to carry out activities at the national level in Mongolia and Sri Lanka. During those activities, specific requirements had been addressed and follow-up had been provided to the UN-SPIDER technical advisory missions carried out in previous years.
- 7. The Subcommittee noted with satisfaction the capacity-building efforts carried out by UN-SPIDER, including the generation of tailor-made space-based information







for three countries affected by floods (the Niger, Nigeria and Tunisia) and countries experiencing forest fires (various Latin American countries) and the provision of virtual support through a massive open online course on the use of geospatial and Earth observation technologies in disaster risk management.

- 8. The Subcommittee noted that UN-SPIDER had expanded its network of regional support offices by integrating two additional organizations into the network: the Federal University of Santa Maria in Brazil and the Ben-Gurion University of the Negev in Israel.
- 9. The Subcommittee noted the continued outreach activities, including webinars and virtual expert meetings, carried out by the Office for Outer Space Affairs, represented by UN-SPIDER, and the Office's partnerships with United Nations entities, international organizations and Member States to continue promoting the use of space-based tools and information.
- 10. The Subcommittee noted ongoing activities to increase the availability and use of space-based solutions in support of disaster management and emergency response. Those activities included promoting the use of emergency Earth observation and cartographic data during natural or technological disasters under the International Charter on Space and Major Disasters, the Sentinel Asia project and the Copernicus Emergency Management Service. In that regard, it was noted that UN-SPIDER had assisted Cameroon, Costa Rica, Ethiopia, the Gambia, Mozambique, the Niger, Panama, Zimbabwe and the Cayman Islands in becoming authorized users. It was also noted that the activation by UN-SPIDER of the International Charter had successfully facilitated access to satellite imagery and space-based information in support of disaster response following floods in Mexico, the Niger and the Sudan, and a landslide in Myanmar.
- 11. Some delegations expressed the view that Earth observation, global navigation satellite systems and emerging complementary technologies, including artificial intelligence, cloud computing and visualization technologies, were making an important contribution to disaster risk reduction. Those delegations also expressed the view that Earth observation and emerging complementary technologies could also be applied in the monitoring of climate, climate change and disasters caused by changing climate conditions.
- 12. Some delegations expressed the view that the use of Earth observation data and complementary technologies was essential for supporting the prediction of disasters such as river and coastline flooding and forest fires, and was an essential feature of the best models of effective responses in both remote and populated areas.
- 13. Some delegations expressed the view that space-based emergency mapping could be achieved more effectively through international collaboration. The delegations expressing that view also expressed the view that the provision of Earth observation data and images of disaster areas supported under activations of the Charter was a key example of international collaboration in that regard.
- 14. Some delegations expressed the view that Earth observation data and images were a crucial aspect of effective and timely disaster management and emergency response and that utilizing such data and images contributed substantially to continuous monitoring and detection for early warning. The delegations expressing that view also expressed the view that international collaboration and support under activations of the Charter provided decision makers with crucial and timely data and images to support effective emergency response.
- 15. The Subcommittee noted the in-kind contributions, including the provision of experts, made by States members of the Committee and regional support offices in 2020 in support of an advisory mission, advisory webinars, virtual expert meetings and related activities conducted by the Office for Outer Space Affairs through UN-SPIDER, and their efforts to share experiences with other interested countries.

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16. The Subcommittee noted with appreciation the voluntary contributions made to the Office for Outer Space Affairs and its UN-SPIDER programme by member States, including the cash contributions from China and Germany, and again encouraged other member States to provide the activities and programmes of the Office, including UN-SPIDER, with all necessary support on a voluntary basis, including increased financial support, to enable it to better respond to Member States' requests for assistance and to fully carry out its workplan in the coming years.

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