## **UNCOPUOS Scientific and Technical Subcommittee**

59<sup>th</sup> Session, Vienna/Online, 7-18 February 2022 Statement by Germany on

Agenda item 8: Space debris

Mr. Chair, distinguished delegates,

the number of human-made objects residing in Earth's orbit has been increasing since the beginning of human spaceflight activities. As space debris accumulates in certain orbital regions, especially in the Low Earth Orbit, the number of close encounters between operational spacecraft and space debris is rising. To mitigate the risk of potential collisions, the German Space Situational Awareness Centre - GSSAC – is operating a database to exchange measurement data of space debris within the European EUSST Consortium for the provision of SST services including a collision avoidance warning service. Also, the data of the German Experimental Surveillance and Tracking Radar – GESTRA – will be fed into this database.

As we have started to enter a new phase of space activities with an unprecedented number of spacecraft launched into the Low Earth orbital region per year, the number of close encounters between operational spacecraft starts to increase significantly as well. This not only calls for increased efforts to monitor space debris, but also to further develop practicable means for the exchange of information and coordination between operators, as has been outlined in Chapter B of the Guidelines on the Long-term Sustainability of Outer Space Activities. In the future, these developments could be effectively addressed by an international space traffic management system to protect operational spacecraft and ensure the viability of private and public investments in space.

Effort should be taken by all space faring nations to avoid the further increase of space debris and reduce the risks to operational spacecraft by

implementing space debris mitigation guidelines and avoiding releasing or intentionally creating additional space debris.

Mr Chair, distinguished delegates,

space debris is a topic that is being addressed by scientists and engineers worldwide. Since many years, German scientists at universities and research institutes conduct research on various aspects related to this issue, including predictions on the future space debris environment, research on hypervelocity impact effects and spacecraft re-entry. For a detailed overview of space debris research projects conducted in Germany as part of the national space debris research programme, we invite you to consult the document A/AC.105/C.1/120. This research also contributes to the work of the Inter-Agency Space Debris Coordination Committee, IADC, which was chaired by DLR until autumn last year. During this time, the IADC issued three updated documents including its worldwide recognized IADC Space Debris Mitigation Guidelines. It also updated this Committee in August on its activities through a technical presentation and informed the International Committee on Global Navigation Satellite Systems (ICG) about study result on disposal options for satellites in Medium Earth Orbits.

Space debris mitigation requirements are implemented for Germany's national space missions by the German Space Agency at DLR consistent with the Space Debris Mitigation Guidelines of this Committee and those of the IADC. Recently, the German Space Agency also started an initiative to further improve space debris mitigation in DLR supported small satellite projects at universities and research institutes to ensure that the mitigation measures are implemented as mandatory requirements in research grants for space missions.

Mr. Chair, distinguished delegates,

Germany stays committed to a responsible and sustainable use of the Earth's orbit by minimizing the impact of its space missions on the future orbital environment in order to support a sustainable use of outer space.

We thank you for your kind attention.