

Contribution by the Federal Republic of Germany to the report of the UN Secretary General following the UNGA Resolution 77/251 on “Transparency and confidence-building measures in outer space”

The numbers in this national contribution refer to the respective items of A/68/189 (“Report of the Group of Governmental Experts on Transparency and Confidence-Building Measure in Outer Space Activities”) of 29 July 2013.

Transparency

[36] Germany maintains a regular exchange of space-security related information on policies, strategies and capabilities with a number of space-faring and non-space-faring countries, including France, Great Britain, the United States of America, New Zealand, Canada, Australia, Japan, Republic of Korea, The Philippines, The Netherlands, Sweden and others.

[37] The German Space Strategy was presented in 2010 by the Federal Ministry of Economy and is currently being updated. The Federal Ministry of Defense adopted in 2017 its first Strategic Guidelines for Space. A national Space Security Strategy is in the process of being drafted by the Federal Foreign Office and the Federal Ministry of Defense. Information on major outer space research results in Germany is regularly published on the website of the German Space Agency (DLR).

[38] The defense budget is published every year to the public. Expenditures – including on space security – can be divided into four categories:

- Operating Expenditures: These include personnel expenditures, expenditures for material maintenance and other operating expenditures (for example, management of real estate, operating supplies, business supplies).
- Operating contracts for the further development of the Armed Forces. This includes expenditure for the private-law companies in the portfolio of the Federal Ministry of Defense.
- Capital expenditures consisting of research, development and testing, military procurement, military equipment and other investments.
- Pension expenses: These are expenses for former soldiers and civil servants from the portfolio of the Federal Ministry of Defense and their surviving dependents.

[39] Germany has recently updated its focal point for the Register of Objects Launched into Outer Space in order to facilitate communication and exchange with other States on space objects and registration cases. A real-time map of orbital data is made available at <https://whatsin.space>.

Under the lead of the German Space Agency (DLR), the “European Operations Framework” (EOF) has been developed as part of the PERASPERA/PERASPERA-X project within the EU’s funding program for research and innovation Horizon 2020. EOF consists of a handbook and guidelines for on-orbit servicing (OOS) activities. It names transparency as the core principle for OOS, followed by the requirement that OOS activities should only be conducted when there is an agreement between the involved operators and the respective states of registry of the satellites.

[41] Germany adheres to the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC), which is – together with the Missile Technology Control Regime (MTCR) – the only multilateral instrument in the field of arms control that addresses ballistic missiles. An

important confidence and transparency building measure of the HCoC are pre-launch notifications of ballistic missile and space launch vehicle launches and test flights. Furthermore, subscribing states also submit annual reports on national ballistic missile and space launch vehicle policies. The information exchange within the HCoC framework is coordinated by the Immediate Central Contact in Vienna. Germany meets its reporting obligations diligently. The Federal Armed Forces Verification Centre evaluates the reported data of the subscribing states, analyses the implementation of the HCoC targets and prepares evaluations of missile launches for the preceding year. The assessment includes a comparison of ballistic missile and space launch vehicles launches reported by the pre-launch notifications with those identified by open sources. To further strengthen this evaluation, Germany advocates clearer definitions for the notification of ballistic missile launches within the HCoC framework.

[42 – 44] Risk reduction notifications for selected government-owned space systems in case of imminent threats and risks may be sent to affected space actors.

[45] In September 2022, Germany committed unilaterally itself not to conduct destructive direct-ascent anti-satellite testing. It co-sponsored UN resolution A/RES/77/41 calling not to conduct destructive direct-ascent anti-satellite testing, which was voted for by 154 states at the UN General Assembly in December 2022.

Germany has been a visible proponent in the elaboration, implementation and adaptation of the Space Debris Mitigation Guidelines (2007) and the 21 Guidelines for the Long-Term Sustainability of Outer Space Activities (LTS Guidelines, 2019) of the UN Committee on the Peaceful Uses of Outer Space (COPUOS). In 2022, Germany submitted a comprehensive report on its implementation of the LTS Guidelines to the new LTS Working Group of COPUOS, detailing a wide range of national space activities and how they contribute to space sustainability.

[47] Visits of the Space Situation Center according article X of the Outer Space Treaty are possible and will be carried out if requested.

International Cooperation

[49] Germany is firmly committed to international space cooperation and space diplomacy. It actively takes part in all relevant UN bodies, such as COPUOS and its sub-committees, the Conference on Disarmament and sessions of the UN Disarmament Commission.

At COPUOS and its Scientific and Technical Subcommittee, Germany regularly reports on its space activities through statements and written contributions. These reports describe the missions conducted through the European Space Agency (ESA) or bilaterally in cooperation with other space agencies (e.g. in 2023, our written contribution detailed the final flight of the Stratospheric Observatory for Infrared Astronomy, SOFIA, a joint mission between the German Space Agency and the U.S. National Aeronautics and Space Administration, NASA). They also highlight Germany's engagement in various international space forums/mechanisms, such as the International Charter "Space and Major Disasters".

Germany actively contributes to the newly established UN process for reducing space threats through norms, rules and principles of responsible behaviours, where it co-sponsored the relevant UN General Assembly resolutions and substantively contributed to the Secretary

General's report of 2021 and to the working sessions of the ongoing Open Ended Working Group on space threats. Germany delegated an expert to the Group of Governmental Experts (GGE) for Preventing an Arms Race in Outer Space (PAROS) in 2018 and nominated its national candidate for the coming PAROS GGE in 2023/2024.

In the European Union (EU), Germany is an active player and contributor to space-security related working processes. It has actively supported the drafting of the new EU Space Strategy on Security and Defense that was published in March 2023 and will contribute to its implementation. With the strategy, the EU intends to enhance the level of security and resilience of space operations and services in the EU.

At the European Space Agency (ESA), Germany confirmed its role as the biggest financial contributor at the ESA Ministerial Council 2022 in Paris. This testifies to Germany's strong support of international cooperation, not only within Europe, but also with partners outside of Europe, in order to foster transparency in its space activities. These activities are reported on a regular basis and to a great extent on the websites of ESA and the German Space Agency (DLR). Germany firmly supports ESA's participation in international fora that promote transparency.

Germany regularly participates in NATO work processes, such as the development of the NATO Overarching Space Policy.

Consultative mechanisms

[57] Art. XI of the Outer Space Treaty offers a mechanism for states to share information on their space activities through the United Nations with other states in order to enhance transparency and creating confidence. Germany works with other states through the "Art. XI Project" to promote the greater use of this mechanism in the future and to facilitate a uniform format for the information shared through this channel. For this purpose, Germany and Luxembourg have submitted a joint Conference Room Paper at the Scientific and Technical Subcommittee of COPUOS (A/AC.105/C.1/2023/CRP.30) to initiate discussions on the Art. XI Project in the framework of the Legal Subcommittee of COPUOS. At this year's session of the Legal Subcommittee, the Working Group on Status and Application of the Five United Nations Treaties on Outer Space agreed to exchange views on the implementation of Art. XI starting in the following year.

Outreach

[60] Germany is one of the biggest financial contributors to UNIDIR whose working program on space is instrumental in disseminating knowledge on security and arms control in outer space among space-faring and not-yet-space-faring nations. Germany promotes cross-regional understanding and cooperation in the relevant UN fora (eg. joint working papers in with the Philippines at OEWG on space threats) and pursues an inclusive multi-stakeholder approach by working together with national and international non-governmental organisations as well as commercial and private space actors.