



SPACE DEBRIS: The Role of COPUOS

High-Level Forum Special Session on Space Debris

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UNOOSA



UNITED NATIONS
Office for Outer Space Affairs

COPUOS and Space Debris: Overview

▪ Scientific and Technical Subcommittee (STSC)

STSC

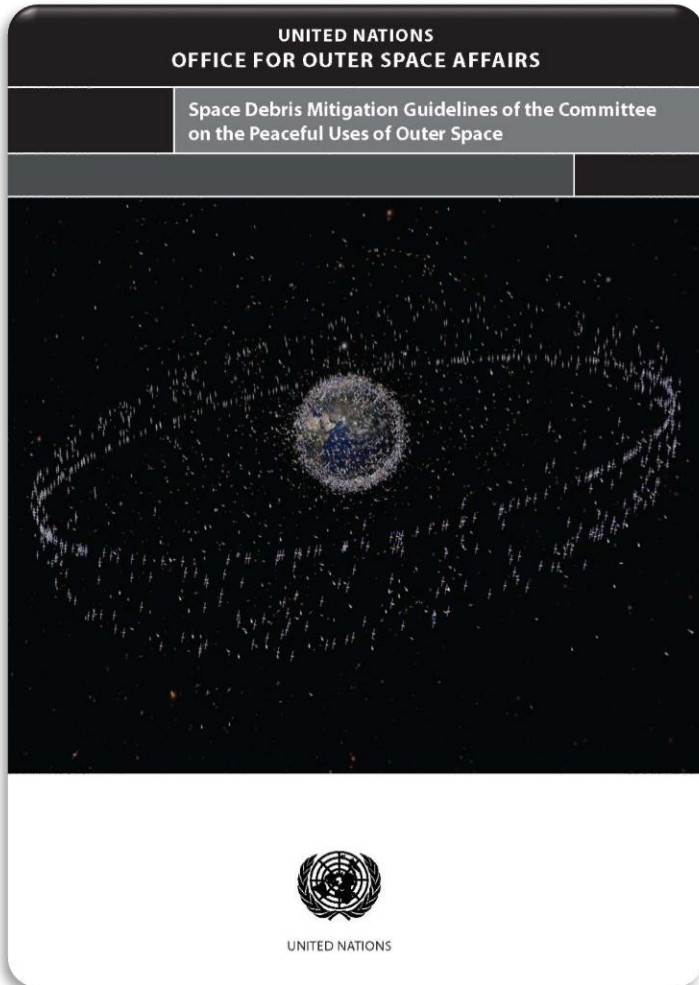
- Space debris included in agenda of STSC from 1994
- STSC work plan 1996-1998 on developing technical report on space debris
- STSC Technical Report on Space Debris adopted in 1999
- STSC Working Group on space debris 2004-2006
- COPUOS Space Debris Mitigation Guidelines adopted in 2007

▪ Legal Subcommittee (LSC)

LSC

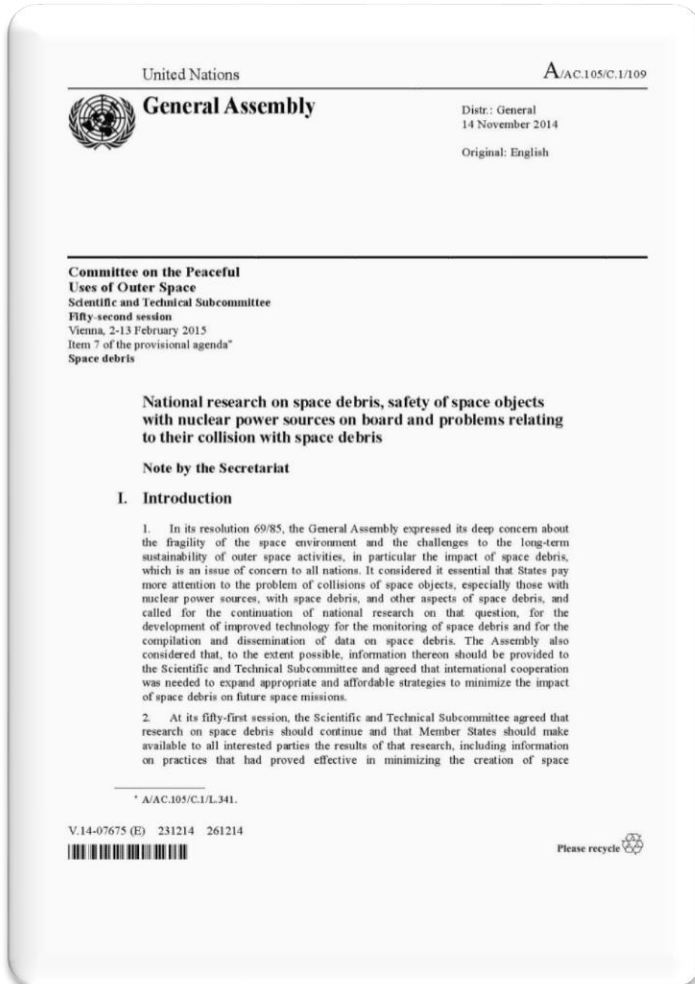
- LSC agenda item “General exchange of information on national mechanisms relating to space debris mitigation measures” (2009)
- “General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee” (from 2012)
- Compendium of space debris mitigation standards (2014)
- Inclusion of “space debris remediation measures” in the agenda item (2017)

COPUOS Space Debris Mitigation Guidelines



- 2003: In meeting STSC request, IADC presents its proposal on space debris mitigation
- 2004: STSC WG on Space Debris is established to develop the Guidelines. Chair: Claudio Portelli (Italy).
 - WG requests IADC to revise its proposals to reflect MS comments;
 - WG conducts a review cycle among MS and observers;
 - WG develops a revised draft of the guidelines.
- Feb 2007: Adoption by STSC (A/AC.105/890, § 99).
- Jun 2007: Committee endorses the guidelines and agrees that its approval of those voluntary guidelines would increase mutual understanding on acceptable activities in space and thus enhance stability in space-related matters and decrease the likelihood of friction and conflict (A/62/20, § 118-9).
- 22 Dec 2007, GA Resolution 62/217: Endorsement

Research on space debris



- Compiled by the Secretariat upon the agreement by STSC that Member States and international organizations with permanent observer status with the Committee should be invited to provide reports on research on space debris, the safety of space objects with nuclear power sources on board, problems relating to the collision of such space objects with space debris and ways in which debris mitigation guidelines were being implemented
- Issued on the basis of information presented by Member States and international organizations:
 - A/AC.105/C.1/111 and Add.1, A/AC.105/C.1/110, A/AC.105/C.1/109 and Add.1, A/AC.105/C.1/108, A/AC.105/C.1/107, A/AC.105/C.1/101, A/AC.105/978, A/AC.105/951 and Add.1, A/AC.105/931 and Add. 1, 2, A/AC.105/918 and Add.1...
 - A/AC.105/C.1/2017/CRP.12, A/AC.105/C.1/2016/CRP.8, A/AC.105/C.1/2015/CRP.7, 8, 16, A/AC.105/C.1/2014/CRP. 6, 7, 8, A/AC.105/C.1/2013/CRP.4, 19, A/AC.105/C.1/2012/CRP.11, A/AC.105/C.1/2009/CRP.11...

Compendium of space debris mitigation standards



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Our Work ▾ Topics ▾ Space Debris ▾ Space Debris Compendium

Compendium of space debris mitigation standards adopted by States and international organizations

The compendium of space debris mitigation standards adopted by States and international organizations has been developed as a contribution of Canada, the Czech Republic and Germany to the Committee on the Peaceful Uses of Outer Space, and in reference to the agenda item of its Legal Subcommittee on "General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee". The aim of the compendium is to inform States of the current instruments and measures that have been implemented by States and international organizations.

The initial version of the Compendium has been made available to the Legal Subcommittee at its fifty-third session held in Vienna from 24 March to 4 April 2014 under agenda item 11 of the provisional agenda of the session (*A/AC.105/C.2/L.292*) as a conference room paper *A/AC.105/C.2/2014/CRP.15*, supplemented by a contribution to the Compendium, contained in *A/AC.105/C.2/2014/CRP.15/Add.1*.

At that session, the Legal Subcommittee noted with appreciation the development of the Compendium by Canada, the Czech Republic and Germany, and requested those delegations to continue their work on the compendium with a view to increasing the number of States and international organizations included therein. The Subcommittee further requested that the compendium be provided to the Secretariat prior to the fifty-seventh session of the Committee, in June 2014 (*A/AC.105/1067*, para. 154).

An updated Compendium was provided to the Committee on the Peaceful Uses of Outer Space at its fifty-seventh session held in Vienna from 11 to 20 June 2014 as a conference room paper *A/AC.105/2014/CRP.13*. Editorial support in compiling and finalizing the Compendium was provided to Canada, the Czech Republic and Germany by the Legal Services Department of the European Space Agency (ESA).

The Committee expressed its appreciation to Canada, the Czech Republic and Germany for the development of the compendium and requested the Secretariat to maintain the compendium on a dedicated page of the website of the Office for Outer Space Affairs (*A/69/20*, para. 261).

The Committee agreed that member States of the Committee and international intergovernmental organizations with permanent observer status with the Committee should be invited to provide or update the information on any legislation or standards adopted with regard to space debris mitigation, using the template provided for that purpose. The Committee also agreed that all other States Members of the United Nations should be invited to contribute to the compendium, encouraging States with such regulations or standards to provide information on them.

An updated compendium was distributed as a conference room paper (*A/AC.105/C.1/2015/CRP.9*) to the 52nd session of the Scientific and Technical Subcommittee held in Vienna from 2 to 13 February 2015. The fully-updated compendium will be made available to the Legal Subcommittee at its fifty-fourth session, in 2015 (*A/69/20*, para. 262).

Note: Files are presently available in PDF format in English only unless indicated otherwise.

Part 1: National mechanisms (as of 8 September 2015)

- Developed as a contribution of Canada, the Czech Republic and Germany to the Committee, and in reference to the LSC agenda item on General exchange of information and views on legal mechanisms relating to space debris mitigation measures (2014)
- Content:
 - **Part 1: National mechanisms**
(Algeria, Argentina, Australia, Austria, Belgium, Canada, Chile, Czech Republic, France, Germany, Italy, Japan, Mexico, Netherlands, Nigeria, Poland, Slovakia, Spain, Switzerland, Ukraine, UK, and USA)
 - **Part 2: International mechanisms**
(European Code of Conduct for Space Debris Mitigation, ESA Space Debris Mitigation Guidelines for Agency Projects, IADC Space Debris Mitigation Guidelines, ITU Recommendation ITU-R S.1003.2, Space Debris Mitigation Guidelines of the Committee)
- Hosted by the Office on its website at:
<http://www.unoosa.org/oosa/en/ourwork/topics/space-debris/compendium.html>

GA Resolutions

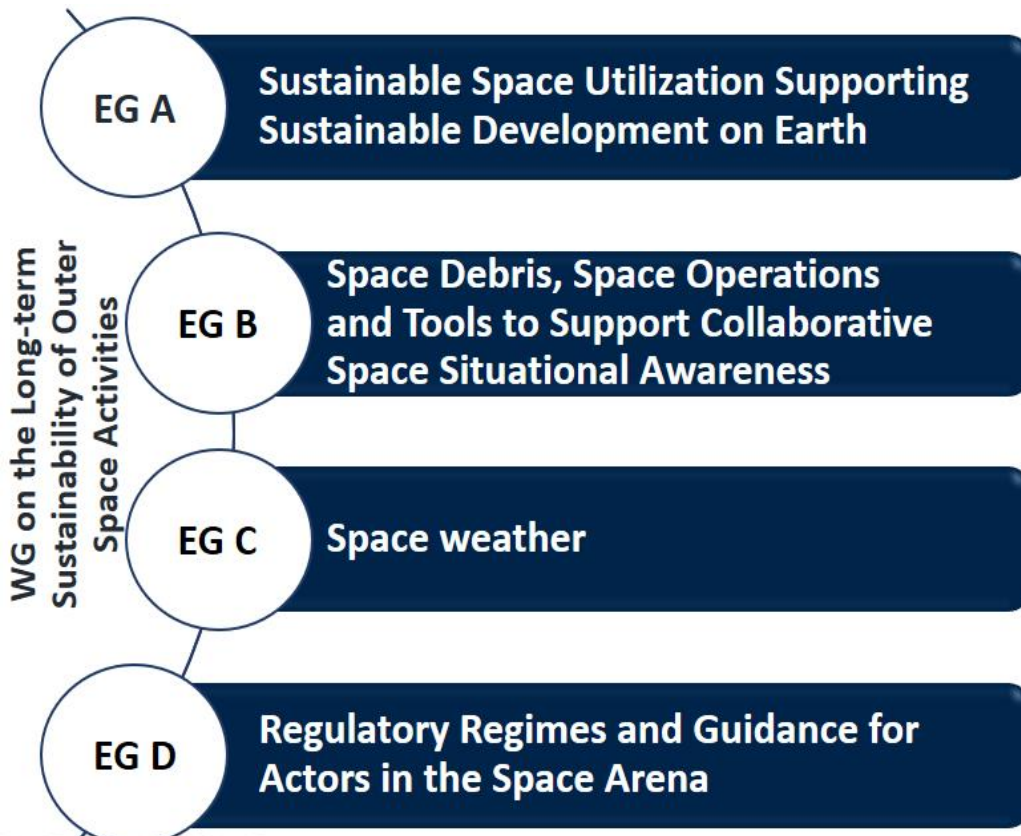


The General Assembly,

- *Deeply concerned* about the fragility of the space environment and the challenges to the long-term sustainability of outer space activities, in particular the impact of space debris, which is an issue of concern to all nations,
- *Notes with appreciation* that some Member States are already implementing space debris mitigation measures on a voluntary basis...
 - Considers that it is essential that Member States pay more attention to the problem of the gradually increasing probability of collisions of space objects, especially those with nuclear power sources, with space debris, and other aspects of space debris,
 - Calls for the continuation of national research on this question, for the development of improved technology for the monitoring of space debris and for the compilation and dissemination of data on space debris,
 - Agrees that international cooperation is needed to expand appropriate and affordable strategies to minimize the impact of space debris on future space missions.

Long-term Sustainability of Outer Space Activities

Working Group of the Scientific and Technical Subcommittee on the Long-term Sustainability of Outer Space Activities (extended work plan to 2018)



Expert Group B of WG LTS:

- Focus: space debris, space operations and tools for supporting collaborative space situational awareness;
- Participation: ~70 experts;
- Co-chairs: Claudio Portelli (Italy) and Richard Buenneke (United States);
- Produced detailed working report (A/AC.105/2014/CRP.14), which focused on space debris monitoring, space debris mitigation, accuracy of orbital data and conjunction assessment;
- Proposed eight candidate guidelines and three topics for future consideration.

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