In 2010, the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) established the Working Group on the Long-term Sustainability of Outer Space Activities. The Working Group is tasked with producing a consensus report containing voluntary best-practice guidelines for all space actors to help ensure the long-term sustainable use of outer space. The draft candidate guidelines are currently under consideration by UN COPUOS Member States. The official work plan calls for finalization of the guidelines by 2016, followed by referral to the United Nations General Assembly.

History and Background

The Working Group on the Long-term Sustainability of Outer Space Activities is an initiative under the Scientific and Technical Subcommittee (STSC) of the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS). The Working Group’s goal is to examine and propose measures to ensure the safe and sustainable use of outer space for peaceful purposes and for the benefit of all countries. The Working Group will produce a consensus report outlining voluntary best-practice guidelines for space activities.

The topic of long-term sustainability of space activities has been discussed within the UN COPUOS framework since 2004, when then-chair of the Committee Karl Doetsch delivered a speech on the issue. In 2007, then-chair Gérard Brachet contributed a white paper on the topic. The following year, the French delegation announced its plan to submit an official proposal to UN COPUOS to add a sustainability item to the agenda. This led to its inclusion in the STSC agenda in 2010, and the establishment of an official Working Group under the chairmanship of South Africa’s Peter Martinez. The Working Group’s Terms of Reference were finalized in 2011, and four expert groups were established under the Working Group to discuss topics relevant to long-term space sustainability. The timeline below summarizes the history and workplan of the LTS Working Group.

Timeline of UN COPUOS Long-term Sustainability Working Group

- 2004: Karl Doetsch speech
- 2007: Gérard Brachet’s white paper, first mention of LTS in UN COPUOS report
- 2008: UN COPUOS adopts LTS agenda item and establishes multi-year work plan
- 2009: LTS Working Group meets for first time
- 2010: Working Group agrees upon Terms of Reference and forms expert groups
- 2011: France informs STSC it will propose LTS agenda item at next year’s UN COPUOS meeting
- 2012: LTS Working Group prepare their draft report
- 2013: LTS Working Group and its expert groups continue to meet
- 2014: Review and finalize draft report in STSC
- 2015: Finalization of LTS guidelines at UN COPUOS and referral to UN General Assembly
- 2016: Deadline for new guidelines and finalization at STSC
Focus and Structure

The Working Group’s Terms of Reference define its objectives, scope and organization. The Working Group will examine the long-term sustainability of space activities within the broader context of sustainable development on Earth; consider current practices, operating procedures, technical standards, and policies relevant to space sustainability and safety; and take as its legal framework the existing UN treaties and principles governing space activities. The Working Group aims to identify areas of concern to space sustainability; examine and propose measures that could enhance all aspects of sustainability; and prepare a report containing a consolidated set of best practices that could be applied voluntarily by States, international organizations, national non-governmental organizations, and the private sector. In addition to focusing on how space supports sustainable development on Earth, the Terms of Reference also emphasize equitable access to the space domain for all actors.

Four expert groups were created to discuss specific topics and develop draft guidelines. State delegations and intergovernmental bodies with permanent observer status at UN COPUOS were allowed to nominate non-governmental experts to the expert groups as a part of their official delegation. Inputs were invited from other UN bodies, such as the Conference on Disarmament and the International Telecommunication Union (ITU), and non-UN intergovernmental bodies, such as the Inter-Agency Space Debris Coordination Committee (IADC) and the International Academy of Astronautics (IAA). After much debate, it was agreed that non-governmental organizations (NGOs) and private sector inputs were welcome if submitted through a State delegation. The expert groups’ topics were:

- A — Sustainable space utilization supporting sustainable development on Earth
- B — Space debris, space operations and tools to support space situational awareness sharing
- C — Space weather
- D — Regulatory regimes and guidance for new actors in the space arena

The expert groups met multiple times between 2011 and 2013, including formal meetings during UN COPUOS meetings as well as on the margins of UN COPUOS, and informally at space-related conferences. In 2013, the expert groups prepared draft reports and guidelines, submitting them to the STSC in February 2014.

Draft Guidelines

Expert groups A, C, and D finalized their reports for STSC 2014, while expert group B worked on the margins of the session to finalize its report. The expert group reports contained 33 draft guidelines on the long-term sustainability of space activities. Eight draft guidelines provided guidance on the development of policies and practices supporting space sustainability while other guidelines addressed the development of regulatory frameworks and practices, and four guidelines addressed and encouraged international cooperation on sustainability issues. Nine guidelines provided technical and scientific guidance on the collection, archiving, sharing, and dissemination of information on space objects and space weather, and the use of information standards. The draft guidelines are voluntary in nature and are not legally binding under international law, and are intended to supplement the guidance in existing regulatory standards and requirements.

In 2014, Working Group Chair Peter Martinez assessed these 33 draft guidelines for overlap, and combined them into 18 consolidated draft guidelines. The consolidated guidelines largely retain the structure of the initial 33 draft guidelines, grouping them along policy, regulatory, international cooperation, and management categories, along with space debris, operations, and tools for collaborative space situational awareness.

Subsequent to COPUS 2014, the Working Group continued to receive comments and additional draft guidelines. Two additional draft guidelines were submitted by the Russian Federation. The Russian proposals address active debris removal, and ground and information infrastructures. Additionally, a new Swiss proposal was concerned with new measures for space sustainability. With these additional proposals, the Chair of the Working Group circulated an updated set of draft guidelines in October of 2014 for the intersessional consideration of Member States before the February 2015 meeting of UN COPUOS STSC. Subsequent new proposals for guidelines are expected by other Member States leading into 2015.
The Way Forward

Looking toward 2015 and beyond, The STSC has agreed to a multiyear workplan that sees the LTS guidelines finalized at STSC in February 2015, consensus agreement reached by the UN COPUOS plenary in June 2016, and their subsequent referral to the UN General Assembly in the fall of 2016.\(^{11}\)

In 2015, the STSC shall meet from 2-13 February for its 52\(^{nd}\) session. UN COPUOS Member States are encouraged to submit proposals on significant new elements, proposals on structural changes to existing guidelines or additional draft guidelines by the start of STSC 2015. At STSC 2015, the LTS Working Group will consider the consolidated draft guidelines along with any additional input from Member States, and aim to consolidate the text of the draft guidelines by the end of STSC 2015, and not require any further revisions of its workplan.\(^{12}\)

At the UN COPUOS plenary in 10-19 June 2015, UN COPUOS shall meet for its 58\(^{th}\) Session. The deadline for proposing significant new elements to existing guidelines or additional guidelines is the plenary session of UN COPUOS in June 2015. The LTS Working Group will again consider its revised draft report containing the updated draft guidelines, as well as any additional proposals for guidelines.\(^{13}\)

The following year, at the 53\(^{rd}\) Session of the STSC in 2016, the Working Group will again consider its draft report and the updated guidelines with an aim of “decisively moving forward with the finalization process.”\(^{14}\)

At the UN COPUOS plenary in 2016, the finalization process has three aims: addressing any outstanding issues with the draft report and the guidelines, considering and agreeing on the final form that the guidelines will be presented to the UN General Assembly later that year, and considering topics for future discussion dealing with the long-term sustainability of outer space activities.\(^{15}\)

A number of issues and suggestions have surfaced with the draft guidelines that might need to be addressed in their further development and finalization. At UN COPUOS 2014, delegations expressed concern that in the consolidation of guidelines (such as the Chairman’s proposed consolidation of the initial 33 draft guidelines into 18) the language of the guidelines should become so “streamlined and simplified to the extent that their substance no longer offered practical solutions to real problems.”\(^{16}\)

At the UN General Assembly’s 69\(^{th}\) Session, in the fall of 2014, the UNGA Fourth Committee (Special Political and Decolonization), to which UN COPUOS reports, also considered the LTS work under agenda item 49: “International Cooperation in the Peaceful Uses of Outer Space,” thus showing the attention and emphasis on this ongoing multilateral process.

Endnotes
1. 53\(^{rd}\) UN COPUOS Report (2010), A/65/20, pg. 21.
4. As part of the U.S. delegation to UN COPUOS, the Secure World Foundation participated in all of these LTS Expert Groups.
12. 57\(^{th}\) UN COPUOS Report (2014), A/69/20 para. 199 (a) and (b), pg. 27.
13. 57\(^{th}\) UN COPUOS Report (2014), A/69/20 para. 199 (c), pg. 27.
14. 57\(^{th}\) UN COPUOS Report (2014), A/69/20 para. 199 (d), pg. 27.