

THE COPUOS BRIEFING BOOK



SECURE
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FOUNDATION

**THE
COPUOS
BRIEFING
BOOK**

2023 EDITION

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Editor

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SECURE WORLD FOUNDATION

The Secure World Foundation is a private operating foundation that promotes cooperative solutions for space sustainability and the peaceful uses of outer space. The Foundation acts as a research body, convener, and facilitator to promote key space security and other space-related topics and to examine their influence on governance and international development. Founded in 2002, the Secure World Foundation was granted permanent observer status at the Committee on the Peaceful Uses of Outer Space in 2008, and special consultative status with the United Nations Economic and Social Council in 2010. The Foundation participates regularly in the various fora of the United Nations dealing with outer space affairs.



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THE COPUOS BRIEFING BOOK

FOREWORD

International institutions matter. The United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) is the most important multilateral forum for fostering and promoting international cooperation in the continued exploration and peaceful uses of outer space. Established as a standing committee of the United Nations with 24 members, COPUOS has grown to become one of the largest standing Committees in the United Nations, reaching the 100-member mark in 2021. The steady growth in COPUOS membership mirrors the growth and globalization of the international space arena.



During its six decades, COPUOS has served as the principal international forum for the progressive development and codification of space law. Moving from the era of treaty-making in the 1960s and 1970s, the Committee has adapted to changing circumstances of the space arena, always maintaining the consensus principle to advance the cooperative governance of space activities. With the dramatic growth of the space arena, if the world did not have a body like COPUOS, it would have to create one, since some of the largest challenges confronting the space arena today are of an intrinsically multilateral nature. Thus, COPUOS will continue to play a central role in multilateral space diplomacy and in the development of norms to ensure the safety and sustainability of outer space activities and to preserve the space environment for future generations.

For COPUOS to function effectively in fostering and promoting the continued exploration and peaceful uses of outer space, it requires that delegates who engage with the Committee do so in a well-informed manner. For delegates who are new to the COPUOS, and often new to space issues as well, getting up to speed with the Committee and its agenda can be a daunting task. Consequently, we offer this Briefing Book to support delegates who are new to the Committee and its important work in the hope that it will facilitate their active participation in the deliberations of COPUOS.

Peter Martinez

*Executive Director, Secure World Foundation
Former Chair, Working Group on the Long-term Sustainability
of Outer Space Activities*

INTRODUCTION

Welcome to the first edition of the *COPUOS Briefing Book*. Whether it's your first time attending a session of COPUOS or your tenth, it's likely that you'll have questions about this Committee: who's who, how the sessions work, why certain topics are being discussed, and how you can contribute to the work of one of the United Nations' largest and most fascinating committees.

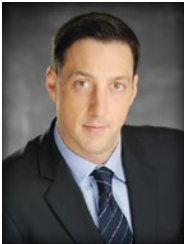
The United Nations Committee on the Peaceful Uses of Outer Space (COPUOS, for short) is the most important international multilateral forum for the discussion of humankind's activities in outer space. From the sharing of information on national space activities and plans, to the exchange of views on what the Committee needs to discuss, to the development of norms governing our behavior in outer space, COPUOS is *the* place for the nations of the world to meet and decide how they will behave in outer space, including on the Moon and other celestial bodies.

Each session of COPUOS, whether the main Committee or one of its two Subcommittees, may seem bewildering at first. Statements are made pursuant to agenda items; member States often address their remarks to the Chair, but at other times to the other member States. Statements are prepared in advance and delivered with little apparent relation to the statement made immediately before or after them. Agenda items are opened for an hour or so, then closed until the next session. Views expressed may be in response to a statement made in previous sessions, statements or actions elsewhere in the UN, or in response to outside geopolitical events. To anyone observing this for the first time, they may not notice the subtle conversations happening between member States. This book should help you see a rich and intelligent conversation

unfolding, speakers expressing complex legal and political ideas, subtle diplomatic maneuvers and intentional rhetoric—all happening under the surface of what appears to be a very businesslike affair run smoothly by a competent Chair and efficient Secretariat.

The *COPUOS Briefing Book* is meant to be a practical guide to understanding what happens here. While it draws on numerous official and academic sources, this book is meant for a wide audience, offering the reader the most essential knowledge to enhance their attendance and participation at COPUOS.

In the coming years, the number of States Parties to the various United Nations treaties on outer space will continue to grow, as will the membership of the Committee. New agenda items and Working Groups will be established, new Chairs will take up the mantle of leading the



Committee, and new norms and rules governing humankind's activities in the peaceful uses of outer space will be developed. At its heart, COPUOS is a community of delegates who are passionate about multilateralism and preserving space for peaceful uses. We hope that this Briefing Book will contribute to the formation of the next generation of thought leaders in COPUOS.

Christopher D. Johnson

*Space Law Advisor, Secure World Foundation,
and Intern, United Nations Office for Outer Space Affairs (Summer 2011)*

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ACRONYMS

ADR	Active Debris Removal
CD	Conference on Disarmament
CSA	Canadian Space Agency
COPUOS	Committee on the Peaceful Uses of Outer Space
ECOSOC	(UN) Economic and Social Council
ECSL	European Center for Space Law
EU	European Union
G77	The Group of 77
GGE	Group of Governmental Experts
GNSS	Global Navigation Satellite Systems
GRULAC	Group of Latin American and Caribbean States
IAEA	International Atomic Energy Commission
IISL	International Institute of Space Law
ITU	International Telecommunication Union
LSC	Legal Subcommittee
NASA	National Aeronautics and Space Association (USA)
NGO	Non-Governmental Organization
OEWG	Open-Ended Working Group
RPO	Ranging and Proximity Operations
STSC	Scientific and Technical Subcommittee
UN	United Nations
UNGA	United Nations General Assembly
UNISPACE	UN Global Conferences on the Exploration and Peaceful Uses of Outer Space
UNODA	United Nations Office for Disarmament Affairs
UNOG	United Nations Office at Geneva
UNOOSA	UN Office for Outer Space Affairs (or OOSA)
UNOV	United Nations Office at Vienna
WEOG	Western European and Other States
WG	Working Group

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The background is a solid yellow color. On the left side, there is a complex, abstract pattern of thin white lines. These lines are mostly vertical and curve slightly to the right, creating a sense of movement and depth. Some lines are straight, while others are curved or overlapping, forming a dense, web-like structure. The overall effect is reminiscent of a stylized signal or a network of connections.

CHAPTER ONE

The United Nations Committee on the Peaceful Uses of Outer Space



PERSONAL REFLECTIONS ON COPUOS

by David Kendall, *Chair 2016-17*



When Chris Johnson contacted me that he and Secure World Foundation were preparing a COPUOS Briefing Book in order to describe the history, operational procedures, and “rules” associated with the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS), I immediately slapped my forehead and shouted “YES!”—what a great idea and why hadn’t I thought of it? When he added that he would appreciate it if I could provide a short essay on my personal reflections relating to the Committee as a past Chair, I immediately and enthusiastically agreed.

As I started to gather my thoughts, my mind reached back to 2009 and the first time I attended a COPUOS meeting. At that time, I was the Director General of the Space Science Branch of the Canadian Space Agency (CSA) and a little wary of and jaded toward meetings and committees where participants talked a lot but did not produce much in the way of concrete actions. I was also vaguely aware that UN meetings inclined toward such an arrangement. However, I had been asked by my Space Policy colleagues at the CSA to present some of the activities that we were pursuing at that time by giving a presentation to the Scientific and Technical Subcommittee (STSC) during its regular February meeting and I was intrigued to find out more about what COPUOS was and did. (As an aside, this presentation still resides on the OOSA website; a testament to the remarkable archive of meeting reports and documentation prepared and maintained by the impressive team at the UN Office for Outer Space Affairs in Vienna.)

My initial reaction in attending my first STSC session was a conviction that perhaps I had made a mistake in spending precious time participating in such a forum. I observed what appeared to me to be a static, carefully managed series of statements provided by representatives of States with little discussion or feedback. Furthermore, most of the statements did not appear to provide any fundamentally new insights into scientific or technical aspects of space activities but rather consisted of brief descriptions of various national initiatives that States were undertaking in reference to specific agenda items.

Fortunately, I had an experienced colleague as Canada's Head of Delegation who explained some of what was going on; however, I admit that I found the overall experience somewhat sterile and uninteresting.

Since I was in Vienna for a few days, I continued to attend the meetings and slowly started to be introduced to and meet people from various national delegations over coffee, lunch, dinner, or at receptions at the end of the day. During these interactions, it became evident that these delegates, many like me with scientific and/or technical backgrounds, were taking the time to participate in the meeting in order to discuss scientific and technical issues and developments with international colleagues and to advance their national space activities. I also started to appreciate that much, if not most, of the important work of the Committee in developing and obtaining the necessary consensus in relation to new directions, ideas and approaches, as well as resolving often challenging policy differences, took place during these informal interactions. Since many of the delegates had represented their nations at the Subcommittee meeting for several years, a level of personal trust and understanding had commonly been built, even amongst those with different ideological dispositions. This so-called "Vienna Spirit," where political and philosophical differences are set aside and diplomats and experts get together on the margins of the formal COPUOS sessions to deliberate, debate, and work towards mutual understanding on challenging issues, was an approach quite new for me, but one that clearly was and is effective.

In attending the Subcommittee meetings for a few days that year, I realized that I had only scratched the surface and that there were still a lot of the details of the work and operation of the Committee and the two Subcommittees that were still unknown to me. It was not until I attended further meetings that I began to recognize the patterns and subtleties within many of the formal statements and documents. These key triggers, coupled with the informal discussion processes described above, built the framework to move ideas forward through the unwritten adherence to consensus followed by the Committee.

In June 2016, after becoming Canada's Head of Delegation to both the STSC and the main Committee, I was elected to the position of Chair of the Committee for the period 2016 to June 2018. It was a great honor to be selected and to chair the Committee throughout that two-year period

during a time of great expansion of the Committee and with several major agenda items to be delivered. These included the final report of the Working Group on the Long-term Sustainability of Outer Space Activities, outstandingly chaired by Peter Martinez, as well as the “Space 2030” agenda and the comprehensive UNISPACE+50 event in 2018 that developed an outline of the priorities of the Committee for the period leading to 2030.

Given the nature of such a committee, during my term as Chair there were also a number of geopolitical issues and challenges that needed to be resolved. Thanks to the outstanding and unwavering support of the OOSA Secretariat, especially the invaluable guidance provided by Niklas Hedman, as well as the support from my delegation and other colleagues, these were successfully untangled. First-time attendees, however, need to realize that such issues are part and parcel of a committee such as COPUOS. Through my association with the Committee, I have come to appreciate the delicate work and fine line that diplomats tread when trying to wrestle with often intractable developments of a geopolitical nature.

To conclude, COPUOS is a unique construct in that it is the only body that includes the membership of all nations engaged in or contemplating outer space activities and that is dedicated to reviewing international cooperation in the peaceful uses of outer space; encouraging space research programs, especially in developing countries; and studying legal problems arising from the exploration of space. If the Committee didn't exist, it would have to be reinvented and I feel tremendously privileged to have been associated with the Committee during this period of my career.

Finally, and in hindsight, how I wish I had had access to this excellent and comprehensive briefing book when I was first exposed to the Committee and Subcommittees these many years ago; it certainly would have made my understanding of this somewhat byzantine and complex committee a lot easier.

Happy reading.

Dave Kendall

*Chair, United Nations Committee on the Peaceful Uses of Outer Space
(2016-2017)*

The United Nations Committee on the Peaceful Uses of Outer Space

1.1 INTRODUCTION

The United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) was created in 1959 as a permanent Committee of the United Nations General Assembly with a broad mandate to promote space sciences and technology, and to study the use of space applications and the nature of legal problems relating to outer space activities. Since its creation, COPUOS has been the main forum for the discussion of space affairs on the international stage. The Committee has two permanent Subcommittees, the Scientific and Technical Subcommittee (also known as STSC) and the Legal Subcommittee (also known as LSC), and many temporary Working Groups to address the full breadth of its mandate. The Committee and its Subcommittees in general follow the operational procedures of the United Nations including conducting its plenary meetings in the six official languages of the UN—Arabic, Chinese, English, French, Spanish, and Russian.

COPUOS had to adapt to changing political circumstances several times during its history. Through these changes it has preserved consensus rather than voting as its main working method. Since 1994, COPUOS and its two Subcommittees have met in Vienna, Austria and this cooperative and carefully balanced approach to deliberation and decision-making has often been referred to as the “Vienna Spirit.”

With the exception of disarmament and most security issues, COPUOS has been the forum for the development of almost all the United Nations treaties, resolutions, and other non-legally binding international instruments on space governance. COPUOS also exists as a forum for scientific and technical exchange and cooperation. The Committee annually reports on its sessions to the United Nations General Assembly (UNGA) in New York, and makes recommendations for issues and/or documents to be considered by the General Assembly.

Situated in the United Nations Office at Vienna (UNOV) complex, the United Nations Office for Outer Space Affairs (UNOOSA) is part of the UN Secretariat and has a broad mandate of its own. The most long-standing of its tasks is to provide secretariat services to COPUOS.

1.2 HISTORY

Beginnings

The launch of *Sputnik-1* on October 4, 1957 brought the issue of space activities into the focus of discussions at the international stage. Upon the initiative of the United States at the United Nations General Assembly (UNGA) in York—and after the submission of several counter and compromise proposals—UNGA Resolution 1348 (XII) was adopted on 13 December 1958. Resolution 1348 created the UN Committee on the Peaceful Uses of Outer Space (COPUOS) as an *ad hoc* (one time) Committee under the General Assembly, initially consisting of eighteen UN Member States.

While the *ad hoc* Committee met twice in 1959, 5 of its 18 members (the USSR, Czechoslovakia, Poland, India, and the United Arab Republic) did not attend. The Committee's report listed a number of legal problems with regards to outer space activities, classifying some problems as priority items to be considered. Consequently, the General Assembly passed Resolution 1472 (XIV) on 12 December 1959, establishing COPUOS as a permanent committee initially comprising 24 members.

After the creation of the permanent Committee, the Soviet bloc remained unwilling to participate. Thus, part of the Committee met only once during its first two years of existence to deal with procedural matters. According to historical sources, the main reason for Soviet opposition was the composition of the new Committee's membership, which was still significantly dominated by western States and other U.S. allies, as well as a number of neutral or non-aligned States. Additionally, the USSR wanted the principle of unanimity (later, consensus) to be established, instead of decisions taken by majority vote, as practiced in the General Assembly.

Eventually, and after prolonged informal discussions, compromise was reached and consensus was adopted as the sole method of decision-making of the Committee, thus ensuring a *quasi-veto* right of every member. In 1961, the General Assembly added four additional members (Chad, Mongolia, Morocco, and Sierra Leone) to the Committee, and extended the original two-year term of all members of the Committee indefinitely. Like the *ad hoc* Committee before it, the new permanent COPUOS had two subsidiary bodies to inform its discussions: the Legal Subcommittee (LSC) and the Scientific and Technical Subcommittee (STSC). COPUOS, along with its two Subcommittees, have met annually since 1962 (with some minor exceptions for the STSC).

The balance between western and Soviet bloc States was also instrumental as to the choices of the leadership of the Committee and its subsidiary bodies. In 1962, the Committee chose the neutral state of Austria as Chair, Romania as Vice-Chair, and Brazil as Rapporteur of the main Committee. This composition would only be changed to a rotation system after the end of the Cold War. For a long period, the LSC and the STSC would be chaired by a member of the Soviet and of the western blocs, respectively. However, the domination by Soviet and U.S. interests would also be cited by the People's Republic of China as the reason for refraining from applying for membership of the Committee until 1980.¹

The Treaty-Making Era

During its first 20 years of its existence, the Committee served as the forum for the negotiation and drafting of the five main UN space law treaties, in addition to several important UNGA resolutions. The 1967 Outer Space Treaty, the 1968 Return and Rescue Agreement, the 1972 Liability Convention, the 1975 Registration Convention, and the 1979 Moon Agreement serve today as providing the normative framework for activities in outer space, as well as an illustration of the power of COPUOS and of the UN for advancing the rule of law in outer space (see Section 1.9 of this chapter for further details on these treaties).

With the exception of the 1979 Moon Agreement, these treaties were quickly and widely ratified, especially by the major space-faring nations and (where possible) several international intergovernmental organizations such as the European Space Agency, which lodged declarations to take on the rights and obligations under the treaties. To date, a vast majority of the members of COPUOS have ratified—at least—the 1967 Outer Space Treaty.

Along with treaty development, COPUOS also drafted a series of principles relating to various matters of space activities, including remote sensing and direct television broadcasting. These were adopted as resolutions by the General Assembly during and after the COPUOS treaty era, and parts of them may reflect emerging norms of customary law and also bear significant political weight.

The Soft Law Era

By the 1990s, discussions in COPUOS on new treaties had largely lost momentum, and the agendas of the Committee and its Subcommittees had not changed or been updated in more than a decade. This was partly due to the reluctance of States to put new items on the agenda of the Committee. At the request of the Committee, in 1996 the UNGA approved

¹ P. Jankowitsch, *The Background and History of Space Law* in F. v.d. Dunk et al (eds.), *HANDBOOK OF SPACE LAW*, p. 11-12 (2015).

changes to COPUOS's leadership (the Bureau) concerning the election procedure and terms of office. In 1999, the UNGA approved changes to its methods of work and the addition of new agenda items.

In the first two decades of the 21st century, the Committee has focused on the drafting of non-legally binding soft law documents. In distinction to earlier principles resolutions, the documents agreed upon during this era contain best practices and other guidelines for member States, including the registration practice for space objects, national space legislation, space debris mitigation, and other matters. Although UN resolutions, guidelines, and principles do not have the legally binding force of a treaty, many States consider them politically binding, and often implement the provisions contained in them into their national regulatory frameworks for space activities. However, those documents do not provide comprehensive legally binding regulation or legal certainty for the diverse set of space activities to be expected for the future.

Future of COPUOS

More than 60 years after its creation, COPUOS is still the main international forum for discussing issues of outer space governance. However, whether it will continue to hold this position will depend both on its work and on the external forces shaping the evolution of the global space arena. There have already been attempts by groups of States members of the Committee or civil society to develop space governance in the 21st century outside the framework of COPUOS. These actions are taken perhaps because their proponents may perceive a lack of timely progress within COPUOS in addressing what they view as the most pressing space governance challenges, or perhaps because they seek to entrench their particular legal interpretations of the current space treaties on a variety of emerging, novel space activities.

Views differ on what the Committee's role is today, and what it should be in the future. Admittedly, there are many areas that could benefit from reform or clarification, such as the mandate of the Committee, rethinking its approach to membership, or various procedural reforms. However, the Committee has been able to adapt to changes in circumstances before. If the Committee is supposed to maintain its central role in the promotion of international cooperation in and regulation of space activities, a piecemeal adjustment of small procedural issues may not be enough. However, to quote the words of Clive Archer, the Committee, as well as the UN in general, "is a mirror of the world around it, and if the reflection is ugly, the organization should not be blamed."²

² C. Archer, INTERNATIONAL ORGANIZATIONS p. 27 (1992).

1.3 COPUOS IN THE UN SYSTEM

Status

Under the Charter of the United Nations (UN), the UN General Assembly (UNGA) has the power to create subsidiary organs (Arts. 7(2), 22) and to adopt its own rules of procedure (Art. 21). Acting under these powers, the General Assembly established the permanent Committee on the Peaceful Uses of Outer Space (COPUOS) in 1959, just like it had established its *ad hoc* predecessor in 1958. COPUOS is thus a standing subsidiary organ of the General Assembly. It is tasked to report annually to the General Assembly on its proceedings within the bounds of its mandate and, through this report, to seek approval of its agenda for the following year.

Under the *implied powers doctrine*, whereby international organizations have certain un-enumerated powers to give effect to their enumerated powers, the General Assembly could have provided COPUOS with powers beyond its own, if necessary to fulfill its function. It did not do so, however, and therefore COPUOS may not make internationally binding decisions in any way. COPUOS is thus subordinate to the General Assembly regarding its mandate and substantive work, as well as its rules of procedure.

COPUOS, through its Chair, now reports to the General Assembly's Fourth Committee (Special Political and Decolonization Committee), after originally reporting to the First Committee at the time of its creation. COPUOS, just like the General Assembly itself, is merely an organ of an international organization and—in distinction to the UN as a whole—does not possess an independent international legal personality. Within the Fourth Committee, the Chair of COPUOS also presides over that Committee's Working Group of the Whole, to consider the agenda item on *International Cooperation in the Peaceful Uses of Outer Space*. During this meeting in New York every fall, all UN Member States consider, paragraph by paragraph, the annual UN space resolution and the report of COPUOS for that year, as well as the agenda for the following year.

During the plenary discussion of the agenda item on the International Cooperation in the Peaceful Uses of Outer Space, the Chair of COPUOS speaks to the UNGA and reports on the activities of COPUOS. The General Assembly usually considers the Fourth Committee's reports on the report of COPUOS in late November—early December and usually passes its annual resolutions on international cooperation in the peaceful uses of outer space in mid-December.

Mandate

COPUOS's mandate was established on 12 December 1959 in UNGA Resolution 1472 (XIV). It is substantially the same as the mandate of the previous *ad hoc* Committee.

International Co-Operation In The Peaceful Uses Of Outer Space

The General Assembly,

Recognizing the common interest of mankind as a whole in furthering the peaceful use of outer space,

Believing that the exploration and use of outer space should be only for the betterment of mankind and to the benefit of States irrespective of the stage of their economic or scientific development,

Desiring to avoid the extension of present national rivalries into this new field,

Recognizing the great importance of international cooperation in the exploration and exploitation of outer space for peaceful purposes,

Noting the continuing programmes of scientific cooperation in the exploration of outer space being undertaken by the international scientific community,

Believing also that the United Nations should promote international co-operation in the peaceful uses of outer space,

- (1) **Establishes** a Committee on the Peaceful Uses of Outer Space, consisting of Albania, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Czechoslovakia, France, Hungary, India, Iran, Italy, Japan, Lebanon, Mexico, Poland, Romania, Sweden, the Union of Soviet Socialist Republics, the United Arab Republic, the United Kingdom of Great Britain and Northern Ireland and the United States of America, whose members will serve for the years 1960 and 1961, and requests the Committee:
 - (a) To review, as appropriate, the area of international co-operation, and to study practical and feasible means for giving effect to programmes in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices, including, inter alia:
 - (i) Assistance for the continuation on a permanent basis of the research on outer space carried on within the framework of the International Geophysical Year;
 - (ii) Organization of the mutual exchange and dissemination of information on outer space research;

- (iii) Encouragement of national research programmes for the study of outer space, and the rendering of all possible assistance and help towards their realization;
- (b) To study the nature of legal problems which may arise from the exploration of outer space;
- (2) *Requests* the Committee to submit reports on its activities to the subsequent sessions of the General Assembly.

The preamble to the resolution, while not part of its legally-binding operative part, has been used to aid in the interpretation of the mandate. It emphasizes the shared common interest of all States in the benefits to be expected from space science, technology, and exploration. Thus, according to the Preamble, international scientific cooperation in outer space is crucial and should be promoted by the UN. It furthermore recognizes the “great importance of international cooperation in the exploration and exploitation of outer space for peaceful purposes”. This has been one argument, firmly supported by some members of the Committee, that COPUOS is not mandated to and therefore prohibited from considering security issues.

Resolution 1472 furthermore lists the members of the Committee at its inception. The terms of these States’ membership was initially limited to two years. However, in its annual outer space resolution in 1961, the General Assembly extended their membership indefinitely and later proceeded to add new members at its discretion.

Scope

The broad and general language of this mandate has allowed the Committee to concern itself with the wide spectrum of space activities. Essentially, the mandate boils down to three main issues:

1. The overall promotion of international cooperation in space activities and related research;
2. The study of feasible programmes to be undertaken in the peaceful uses of outer space, under the auspices of the UN to promote research on space science and technology, and the exchange of knowledge and information in these areas; and
3. The study of the nature of legal problems which may arise from the exploration of outer space.

Likely due to its origin during the beginning of the space age, the mandate uses very broad terms. There is no mention of issues such as using space capabilities for improving disaster response, or to improve and monitor equitable access to water, for example. Nevertheless, over time, these issues have been discussed at COPUOS and at UNISPACE

conferences, and have been included into the tasks of the UN Office for Outer Space Affairs.

This mandate does not empower COPUOS to make any binding decisions under a delegated power of the General Assembly, but merely to report on its proceedings to the General Assembly annually, and make recommendations on decisions to be taken by the General Assembly and the space science and technology research cooperation programs of the UN itself. In several later resolutions, the General Assembly expressed its wishes as to specific agenda items the Committee should deal with or a desired result, such as the draft text of the Rescue and Return Agreement in the wake of the first human casualties of space flight.

It should be noted that the General Assembly may at any time alter the mandate of the Committee and direct its work, whether this concerns the approval of a program to improve disaster response or the specific mandate to negotiate a new draft treaty.

The mandate does not delegate any legislative powers to COPUOS. The report of the Committee usually includes merely procedural matters, an account of the discussions and views expressed, a plan for the meetings and agendas for the following year, the nominations of the Chairs and Vice-Chairs every two years, as well as the endorsed reports of the two Subcommittees that include the work or proposed establishment of Working Groups and their terms of reference. The Legal Subcommittee may, however, draft texts of legal instruments for consideration at the General Assembly, upon endorsement in the Committee's report.

Limitations on Disarmament and Space Security

From its inception, and as indicated by both the name and the Preamble of its mandate, COPUOS has been concerned with the *peaceful* uses of outer space. However, nowhere in the mandate of the Committee, nor in the existing space treaties is the concept of "peaceful uses of outer space" defined. Except for the work of the UN Security Council in New York, and issues of nuclear non-proliferation in Vienna, most debates on security and disarmament issues within the UN framework take place in Geneva. The main body for disarmament issues in Geneva is the Conference on Disarmament (CD). This conference is not formally a body of the UN, and has a limited membership of 65 States distinct from the UN. Nevertheless, it is closely connected to the UN, and its secretariat services are performed by the UN Office for Disarmament Affairs (UNODA). Given the geopolitical context in which COPUOS was created, the aim of maintaining international peace and security in outer space played a role in the creation of COPUOS.

Several provisions of the 1963 Legal Principles Declaration and the 1967 Outer Space Treaty (*Preamble*, Arts. III and IV) directly concern issues of space security, such as military exercises, equipment, and technology in outer space; restrictions on weapons of mass destruction; and conducting space activities in the interest of maintaining international peace and security. Many other provisions apply indiscriminately to military/security as well as to civilian/non-security space activities. From the 1960s to the 1980s, several disarmament treaties were concluded outside of COPUOS, which in part touch or concern outer space. While issues of space security inherently thus appear not to be fully distinct from the work of the Committee, there has been some degree of separation almost from the start of the Committee's work.

To date, the Committee has exhibited self-restraint with respect to issues of space security, beyond measures that are equally applicable to all space activities. There is still debate between some States members of the Committee on whether it should take on a more active role with respect to some issues of space security. Issues relating specifically to space security are on the agenda of the Conference on Disarmament (CD). The CD currently is mandated to address the issues of preventing an arms race in outer space and proposing new rules for responsible behavior in outer space. Most substantive discussions in the CD on these issues happen in Groups of Governmental Experts (GGEs) or Open-Ended Working Groups (OEWGs), instead of the conference's plenary.

While this separation of the discussion on space activities at the UN is likely to persist, some degree of coordination and cooperation will be desirable to comprehensively tackle issues such as Rendezvous and Proximity Operations (RPOs) or active debris removal (ADR), which cut across the mandates of both bodies. In the 2010s, COPUOS tasked UNOOSA (in cooperation with UNODA) to organize biennial joint panel discussions between the General Assembly's First Committee (*inter alia* disarmament) and the Fourth Committee (*inter alia* outer space) to exchange information on the work of COPUOS and the CD with regard to space safety, security, and sustainability.

How the Mandate of COPUOS Might Develop

The UN General Assembly may adapt or reform the mandate and working methods of COPUOS at its discretion, and has done so in the past, although usually acting upon the recommendation from COPUOS. Future developments of COPUOS are discussed at COPUOS itself on a regular basis, under the agenda item *future role and method of work of the Committee*.

Indeed, there is a broad spectrum of avenues for developing the COPUOS mandate, but agreeing to them within COPUOS or the UNGA will likely remain a challenge. Given the importance of the participation of major space-faring nations, it is unlikely that a change to the mandate against their will, and by majority vote in the UNGA, is likely. The Committee could also simply decide to continue its current path towards achieving near universal membership and provide an open forum for broad exchange of information and views on space activities.

The UN General Assembly, in its Resolution 76/3 of 25 October 2021, adopted the Space2030 Agenda and reaffirmed the broad roles and mandate of COPUOS and UNOOSA. The Resolution emphasized their importance and endorsed the implementation plan for the Space2030 Agenda, which was aimed at supporting the Sustainable Development Goals.

There have been some commentators who appreciate the vagueness and theoretical breadth of the Committee's mandate. From their perspective, a broad mandate gives COPUOS flexibility, and enables it to pursue (more or less spontaneously) topics and priority items that members desire.

1.4 COPUOS AND ITS SUBCOMMITTEES

COPUOS has two Subcommittees: the Legal Subcommittee, and the Scientific and Technical Subcommittee. Sometimes referred to with the acronym LSC, the Legal Subcommittee had its first session under COPUOS as a permanent committee in 1962. The Scientific and Technical Subcommittee, sometimes referred to with the acronym STSC, had its first session under COPUOS as a permanent committee in 1963.³

Nandasiri Jasentuliyana, former director of UNOOSA, wrote that the mandate of the Subcommittees is essentially "to assist it in the study of the many specific proposals and suggestions concerning scientific, technical and legal studies made by members of the Committee for the development of international cooperation in the field of space exploration for peaceful purposes."⁴

³ One might wonder why there is a difference in the session numbers of the two Subcommittees, as they were both established in the same year and both first convened in 1962. The reason is that the STSC decided not to hold its annual sessions in 1965 and in 1968. In 1968, the STSC decided against holding its session in addition to the first UNISPACE conference. Thus, to this day, sessions of the STSC are two behind in number those of the LSC.

⁴ N. Jasentuliyana, *INTERNATIONAL SPACE LAW AND THE UNITED NATIONS* p. 24-25. (1999).

The Committee and its Subcommittees hold separate annual sessions spread throughout the first half of the year to discuss their respective agenda items. The Scientific and Technical and the Legal Subcommittees sessions are both of a two-week duration. The STSC usually meets in February, and the LSC usually meets in March or April. Before 1994, they were either meeting in New York, like the Committee itself, or mostly in Geneva. With some historical exceptions, such as the two-part multi-week session of the LSC in the 1960s during the drafting of the Outer Space Treaty, both Subcommittees now meet annually in Vienna. The main COPUOS Committee, sometimes referred to as the “Plenary” (“a meeting attended by and open to all participants at a conference or assembly, who otherwise meet in smaller groups”) meets in early June, for eight days from Wednesday of the first week to Friday of the following week.

The work of the Subcommittees is intended to inform the work of the main Committee. In the first two decades of COPUOS, most substantive discussions in the main Committee happened during the consideration of the reports of the Subcommittees. Today, however, the Committee usually endorses these reports without controversy, while considering several other substantive agenda items.

While the deliberation of the Committee’s mandate on the Subcommittee level was split into the two bodies, both were considered essential to the studies and recommendations to be made by the Committee to the UNGA. There is however no formal procedure of communication between the Subcommittees, which have starkly different agendas and conduct their respective work independently from each other. The only formal deliberation on both the scientific and technical and the legal aspects together happens in the Committee itself.

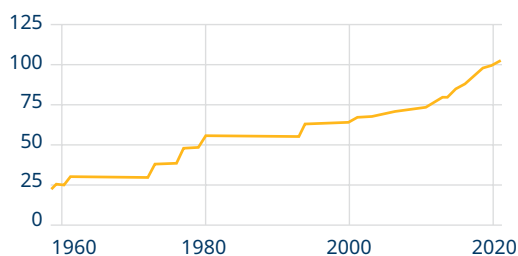


Figure 1.1 | COPUOS Membership Growth by Year

However, representatives to the two Subcommittees do historically engage in significant informal discussions, both in the Committee room and on the sidelines of COPUOS. Recently there has been a move to ensure greater communication between the two Subcommittees. For example, the workplan and methods of work for the *Working Group* on the *Legal Aspects of Space Resource Activities*, established under the LSC in 2021, includes the statement that the Working Group “shall include appropriate means of coordination with the Scientific and Technical Subcommittee.” Another option to ensure greater coordination among the States members of the Committee with respect to cross-cutting topics is to create a Working Group that reports to the main Committee.

1.5 MEMBERSHIP

Growth of the Committee

From its initial membership of just 18 States members in 1958, COPUOS grew to 28 in three years. Thereafter, groups of new members were added in 5- or 10-year intervals. After 1980, the admission of new State members slowed considerably and, with the exception of 1994, the Committee’s membership did not increase until the early 2000s. Since then, COPUOS membership has grown slowly but steadily, and from the mid-2010s the increase of membership has significantly accelerated.

Today, COPUOS has grown to become one of the largest committees in the UN system, with 102 States members as of 2023. With few exceptions, applications for membership by UN Member States are usually recommended by the Committee and endorsed by the UNGA.

Table 1.1 | COPUOS Membership Growth by Year

▼ YEAR	Number Added	Count	Membership
1958	18	18	Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia (now Czechia and Slovakia), France, India, Iran, Italy, Japan, Mexico, Poland, Sweden, the Union of Soviet Socialist Republics (now Russian Federation), the United Arab Republic (now Egypt), the United Kingdom of Great Britain and Northern Ireland, United States of America
1959	+6	24	Albania, Austria, Bulgaria, Hungary, Lebanon, Romania
1961	+4	28	Chad, Mongolia, Morocco, Sierra Leone
1973	+9	37	Chile, Federal Republic of Germany, German Democratic Republic, Indonesia, Kenya, Nigeria, Pakistan, Sudan, Venezuela
1977	+10	47	Benin, Cameroon, Colombia, Ecuador, Iraq, Netherlands, Niger, Philippines, Turkey (now Türkiye), Yugoslavia
1980	+7	53	China, Greece, Spain, Syrian Arab Republic, Upper Volta (now Burkina Faso), Uruguay, Viet Nam
1994	+9	62	Cuba, Kazakhstan, Malaysia, Nicaragua, Peru, Republic of Korea, Senegal, South Africa, Ukraine
2001	+2	64	Saudi Arabia, Slovakia
2002	+1	65	Algeria
2004	+2	67	Libyan Arab Jamahiriya (now Libya), Thailand
2007	+2	69	Bolivia, Switzerland
2010	+1	70	Tunisia
2011	+1	71	Azerbaijan
2012	+3	74	Armenia, Costa Rica, Jordan
2013	+2	76	Belarus, Ghana
2014	+1	77	Luxembourg
2015	+6	83	El Salvador, Israel, Oman, Qatar, Sri Lanka, United Arab Emirates
2016	+1	84	New Zealand
2017	+3	87	Bahrain, Denmark, Norway
2018	+5	92	Cyprus, Ethiopia, Finland, Mauritius, Paraguay
2019	+3	95	Dominican Republic, Rwanda, Singapore
2021	+5	100	Angola, Bangladesh, Kuwait, Panama, Slovenia
2022	+2	102	Guatemala, Uzbekistan

The increasing importance and accessibility of space technology leads to more States becoming interested in COPUOS membership. Once admitted, there is no expected or required level of engagement to

remain in the Committee; member States can be as active or inactive as they choose. Indeed, some member States have not attended a single session of COPUOS or its subcommittees for years. In principle, an existing member of the Committee could be theoretically ejected by UNGA resolution, but this has never yet occurred.

Consequences of Increased Membership

The historical period when the UN space treaties were negotiated coincided with a *détente* in relations between the two Cold War superpowers, and the conclusion of several disarmament, arms control, and non-proliferation treaties. Within COPUOS, the procedure of consensus-based decision-making is credited with the wide acceptance of the treaties and other COPUOS documents. The membership of the Committee was significantly smaller when the text of the last widely ratified treaty, the Rescue Convention, was concluded in 1972 (28) and when the last treaty, the Moon Agreement, was concluded in 1979 (47).

Finding consensus on the text of a new treaty among 100 or more States may be difficult to achieve. In the past, COPUOS has profited from the close informal relations among the small number of members' representatives who had been active on the Committee for years. Today however, increased COPUOS membership has had both positive and negative reactions. There have been voices in academia suggesting that the increase in membership is one of the reasons for its growing permanent agenda, and the decrease in concrete deliverables. To some, a larger Committee is more difficult to manage, especially a body operating exclusively on the basis of consensus.

On the other hand, the increased membership reflects the multipolar world of the 21st century. In this sense, COPUOS membership resembles the UN General Assembly, and its membership is representative of a world of diverse regions and of stages of space development. While this was not necessarily the plan from the beginning, General Assembly Resolution 3182 (XXVIII) of 18 December 1973 emphasized a diverse constituency for COPUOS when adding nine new members: "Bearing in mind that, since the establishment of the Committee on the Peaceful Uses of Outer Space in 1961, the membership of the United Nations has been considerably increased and a corresponding enlargement of the Committee is therefore desirable."

Nevertheless, COPUOS is not a plenary organ of the UN, but a specialized Committee to promote the exchange of information and cooperation on space exploration, science and technology, and to consider and draft decisions for the UNGA to adopt or endorse. The quasi-universal membership of COPUOS enables equal participation by the States of the

Global South, which therefore increases the weight of its decisions or recommendations, especially because they are adopted by consensus of such a large and representative group of States members.

As mentioned above, the Committee continues to accept new member States. As shown above, this growth leads to results which some States members of COPUOS consider desirable, and other effects that some States members consider undesirable. However, members have not agreed to significantly alter the current approach to admitting new members or taking decisions by consensus. This may change as the Committee continuously reviews its working methods under the agenda item, *Future role and method of work of the Committee*.

Requirements and Procedure for Membership

Only Member States of the United Nations can become members of the Committee. COPUOS membership is generally open to all UN Member States applying for membership, without further formal preconditions, although members of the Committee have attempted to block membership applications in the past.⁵ While most members will have ratified at least the Outer Space Treaty and the ITU Convention, this is not a prerequisite for membership in the Committee. The UNGA votes on membership applications annually, usually upon a recommendation by the Committee itself, as mentioned in the annual COPUOS report. Traditionally, all membership applications submitted during the same year are considered by the UNGA together as one slate. The General Assembly may deviate from that, however, and consider applications one by one.

COPUOS Membership and Status of the Treaties

Most members of the Committee are also party to one or more of the five UN space law treaties. If COPUOS was to count all States parties to any one of the treaties among its members, it could theoretically properly act as a review conference to discuss any proposed amendments to that treaty. For example, as of 2023 almost all States parties to the Registration Convention are also members of COPUOS. Obviously, COPUOS could also simply draft a new instrument, designed to be legally binding upon state ratification. There has been no substantial support among the Committee's members for the latter option since the drafting of the Moon Agreement, which was concluded in 1979.

⁵ In instances where the Committee failed to reach consensus on a given membership application, the matter was put forward to the United Nations General Assembly, where the issue was resolved by a vote.

Observers

States members of COPUOS are not the only participants at COPUOS. As a committee under the United Nations General Assembly, COPUOS adheres to formal rules of the UN system. One of those rules is the right for other organs of the UN system to be granted equal representation, subject to UN rules. Keeping in mind that the United Nations Economic and Social Council (ECOSOC) is also one of the main organs of the United Nations (along with the General Assembly, the Security Council, the Secretary-General and its staff, the International Court of Justice, and the Trusteeship Council), members of the ECOSOC are granted rights across the UN system.

While at first limited to a few entities specialized on space affairs (mostly international intergovernmental organizations) the number of observers in COPUOS started to increase slowly from the 1990s and even more so from the early 2000s. Observers now include a constantly rising number of non-governmental/civil society organizations interested in space affairs. However, private entities, such as the private space industry have been restricted from receiving observer status with the Committee. Private industry representatives may, however, be made part of member state delegations to the Committee.

Since its 53rd session in 2010, the Committee has been empowered to grant provisional observer status to non-governmental organizations (NGOs), which may be extended by one more year, if necessary. During this time, the NGO must apply for and be granted special consultative status with the UN Economic and Social Council (ECOSOC). Upon receipt of confirmation of such status, the Committee may grant the NGO permanent observer status to the Committee. Other UN system bodies are invited to attend the sessions of the Committee and its subsidiary bodies as observers.

The Committee may also decide to grant *ad hoc* session observer status to any UN Member States not already members of the Committee. The EU has special status as a permanent observer of the Committee (as well as generally in accordance with General Assembly resolutions 65/276 and 73/91). The observer for the EU may either make a statement for the EU, or on behalf of the EU *and* its member States. Thus, the EU at COPUOS has the same participatory rights to orally present proposals and amendments and a right to reply as in the General Assembly. Nevertheless, in the past some members of the Committee have questioned whether the observer for the EU should make statements during the deliberation of the COPUOS report.

As of 2023, the observers of COPUOS are listed in the tables provided:

Table 1.2 | International Intergovernmental Organization Observers

1972	European Space Agency (ESA)
1985	International Organization of Space Communications (INTERSPUTNIK) International Telecommunication Satellite Organization (ITSO)
1986	International Mobile Satellite Organization (IMSO)
2007	African Organization of Cartography and Remote Sensing (AOCRS)
2008	European Organisation for Astronomical Research in the Southern Hemisphere (ESO) European Telecommunications Satellite Organization (EUTELSAT-IGO)
2009	The Asia-Pacific Space Cooperation Organization (APSCO)
2016	International Air Transport Association (IATA)
2018	European Union (EU) International Organization of Standardization (ISO)
2021	International Institute for the Unification of Private Law (UNIDROIT) Square Kilometre Array Observatory (SKAO)

Table 1.3 | Non-governmental Organization Observers

1962	Committee on Space Research (COSPAR)
1976	International Astronautical Federation (IAF)
1990	International Law Association (ILA) International Society for Photogrammetry and Remote Sensing (ISPRS)
1993	Association of Space Explorers (ASE)
1995	International Academy of Astronautics (IAA) International Astronomical Union (IAU)
1996	The Planetary Society (TPS)
1997	International Space University (ISU)
2001	European Association for the International Space Year (EURISY) Space Generation Advisory Council (SGAC) National Space Society (NSS)
2002	Committee on Earth Observation Satellites (CEOS) World Space Week Association (WSWA)
2003	Centre Regional de teledetection des Etats de l'Afrique du Nord (CRTEAN) International Institute for Applied Systems Analysis (IIASA)
2005	European Space Policy Institute (ESPI)
2008	International Institute of Space Law (IISL) Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW) Secure World Foundation (SWF)
2010	International Association for the Advancement of Space Safety (IAASS)
2011	Association of Remote Sensing Centres in the Arab World (ARSCAW)
2012	Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
2013	Inter Islamic Network on Space Sciences and Technology (ISNET)
2014	African Association of Remote Sensing of the Environment (AARSE)
2017	European Science Foundation (ESF) University Space Engineering Consortium-Global (UNISEC-Global)
2018	CANEUS-International For All Moonkind
2019	Moon Village Association
2021	Open Lunar Foundation International Institute for the Unification of Private Law (UNIDROIT)
2022	Atlantic International Research Centre Access Space Alliance Hague Institute for Global Justice International Peace Alliance (Space)

1.6 LEADERSHIP

Historical Development and Election Procedure

The Bureau of the Committee currently comprises a Chair, a First Vice-Chair, and a Second Vice-Chair/Rapporteur of the Committee, as well as the Chairs of the STSC and of the LSC. In addition, the preceding and future (nominated) members of the Bureau, the current COPUOS Working Group Chairs and Vice-Chairs as well as those leading COPUOS-supported groups (IC GNSS, SMPAG, Committee on Planetary Protection) are invited to Bureau meetings. They are assisted by the non-elected Secretariat of the Committee (UN officials from OOSA). Members of the Bureau are elected for two-year terms.

From 1962 to 1996, the Cold War-balanced composition of the Bureau of the Committee and its two Subcommittees remained largely unchanged. This meant that the permanent Bureau of the Committee was composed of a neutral state as Chair (Austria), a Soviet bloc affiliate as First Vice Chair (Romania) and a western bloc affiliate as Second Vice-Chair/Rapporteur (Brazil). Similarly, during that period a western bloc affiliate (Australia) held the Chair of the STSC and a Soviet bloc affiliate (Poland until 1982, from 1983 Czechoslovakia, from 1993 Czech Republic) held the LSC Chair. In 1997, the General Assembly, acting on the recommendation of the Committee, abolished the long-term chair system and mandated a rotational system, as was customary at the UN in general at the time.⁶ In 2004, the UNGA and the Committee introduced two-year terms for all elected officers in the main Committee and the STSC. The LSC followed suit in 2006.

The officers are elected under the common distribution/balancing system among the five UN main regions (*see List of Chairs of COPUOS table*). The two-year terms may be split up into two one-year terms as a matter of political compromise or if an officer is no longer able to complete their full term. In the latter case, the members of the region nominating the officer leaving before completion of their term shall nominate a new candidate.

Up to two years preceding the respective term of the future Bureau, the regional groups nominate their candidates, which are included into the Committee's report and thus recommended to UNGA. UNGA then usually endorses the report and notes the nominations, thereby approving of them. While the actual election is conducted by the Subcommittees and the Committee themselves at the beginning of their respective sessions, the UNGA under its general power over COPUOS, may deny one or more nominees their approval/endorsement. This likely would prohibit the Committee from electing the respective individual(s).

⁶ UN General Assembly Res. 52/56 of 10 December 1997 "International Cooperation in the Peaceful Uses of Outer Space."

Regional Groups at COPUOS

There are five general regional groups of States at the UN which are also relevant for COPUOS. These are the African States, the Asian-Pacific States, the Latin American and Caribbean States (GRULAC), the Eastern European States, and the Western European and Other States (WEOG). These groups are used at the UN to ensure equitable distributed representation of all Member States among UN employees and elected office holders. At COPUOS there is a set rotational system that determines which group shall nominate a candidate for which office of the COPUOS Bureau. Occasionally, individual States members of the Committee will speak on behalf of a group of States, including the regional groups. While States or observers sometimes make statements on behalf of other large groups of States, such as the G77+China, the European Union, or the European Space Agency, these three are not considered regional groups relevant to the distribution of nomination rights.

Table 1.4 | List of Chairs of COPUOS

▼ YEAR	COPUOS Chair	Vice-Chair (later First Vice-Chair)	Rapporteur (later Second Vice-Chair/ Rapporteur)
1959	Koto Matsudaira (Japan)	Mario Amadeo (Argentina)	Joseph Nisot (Belgium)
1960	no session held		
1961 ⁷	Franz Matsch (Austria)	Mihail Haseganu (Romania)	Geraldo de Carvalho Silos (Brazil)
1962	Franz Matsch (Austria)	Mihail Haseganu (Romania)	Geraldo de Carvalho Silos (Brazil)
1963	Franz Matsch (Austria)	Mihail Haseganu (Romania)	Geraldo de Carvalho Silos (Brazil)
1964	Franz Matsch (Austria)	Mihail Haseganu (Romania)	Geraldo de Carvalho Silos (Brazil)
1965	Kurt Waldheim (Austria)	Mihail Haseganu (Romania)	Geraldo de Carvalho Silos (Brazil)
1966	Kurt Waldheim (Austria)	Gheorghe Diaconescu (Romania)	Geraldo de Carvalho Silos (Brazil)
1967	Kurt Waldheim (Austria)	Gheorghe Diaconescu (Romania)	Geraldo de Carvalho Silos (Brazil)
1968	Kurt Waldheim (Austria)	Gheorghe Diaconescu (Romania)	Geraldo de Carvalho Silos (Brazil)
1969	Heinrich Haymerle (Austria)	Gheorghe Diaconescu (Romania)	Celso A. de Souza e Silva (Brazil)
1970	Heinrich Haymerle (Austria)	Gheorghe Diaconescu (Romania)	Celso A. de Souza e Silva (Brazil)
1971	Kurt Waldheim (Austria)	Gheorghe Diaconescu (Romania)	Celso A. de Souza e Silva (Brazil)
1972	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Celso A. de Souza e Silva (Brazil)
1973	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Celso A. de Souza e Silva (Brazil)
1974	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Luiz Felipe de Seixas- Côrrea (Brazil)

⁷ Merely procedural session held, including a debate on how to amend the composition, mandate, and working methods of COPUOS.

1975	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Luiz Paulo Lindenberg Sette (Brazil)
1976	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Luiz Paulo Lindenberg Sette (Brazil)
1977	Peter Jankowitsch (Austria)	None listed in the COPUOS report.	Luiz Paulo Lindenberg Sette (Brazil)
1978	Peter Jankowitsch (Austria)	Ion Datcu (Romania)	Carlos Moreira Garcia (Brazil)
1979	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Carlos Moreira Garcia (Brazil)
1980	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Carlos Antonio Bettencourt Bueno (Brazil)
1981	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Carlos Antonio Bettencourt Bueno (Brazil)
1982	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Carlos Antonio Bettencourt Bueno (Brazil)
1983	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Henrique Rodrigues Valle (Brazil)
1984	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Henrique Rodrigues Valle (Brazil)
1985	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Henrique Rodrigues Valle (Brazil)
1986	Peter Jankowitsch (Austria)	Teodor Marinescu (Romania)	Henrique Rodrigues Valle (Brazil)
1987	Peter Jankowitsch (Austria)	None listed in the report. ⁸	Henrique Rodrigues Valle (Brazil)
1988	Peter Jankowitsch (Austria)	Petre Tanasie (Romania)	Flavio Miragaia Perri (Brazil)
1989	Peter Jankowitsch (Austria)	Petre Tanasie (Romania)	Flavio Miragaia Perri (Brazil)
1990	Peter Jankowitsch (Austria)	Aurel Dragos Munteanu (Romania)	Flavio Miragaia Perri (Brazil)
1991	Peter Hohenfellner (Austria)	Aurel Dragos Munteanu (Romania)	Flavio Miragaia Perri (Brazil)
1992	Peter Hohenfellner (Austria)	Aurel Dragos Munteanu (Romania)	Edmundo Sussumu Fujita (Brazil)
1993	Peter Hohenfellner (Austria)	Aurel Dragos Munteanu (Romania)	Edgard Telles Ribeiro (Brazil)
1994	Peter Hohenfellner (Austria)	Petru Forna (Romania)	Edgard Telles Ribeiro (Brazil)
1995	Peter Hohenfellner (Austria)	Dumitru Mazilu (Romania)	Edgard Telles Ribeiro (Brazil)
1996	Peter Hohenfellner (Austria)	Dumitru Mazilu (Romania)	Edgard Telles Ribeiro (Brazil)
1997	U. R. Rao (India)	Raimundo González (Chile)	Mousslim Kabbaj (Morocco)
1998	U. R. Rao (India)	Raimundo González (Chile)	vacant

⁸ The post was still held by Teodor Marinescu (Romania). In absence of a Chairman and Vice-Chairman, the 301st meeting of the Committee was chaired by Gheorghe Tinca (Romania).

1999	U. R. Rao (India)	Raimundo González (Chile)	Mohamed Aït Belaïd (Morocco)
2000	Raimundo González (Chile)	Driss El Hadani (Morocco)	Harijono Djodihardjo (Indonesia)
2001	Raimundo González (Chile)	Driss El Hadani (Morocco)	Harijono Djodihardjo (Indonesia)
2002	Raimundo González (Chile)	Driss El Hadani (Morocco)	Harijono Djodihardjo (Indonesia)
2003	Raimundo González (Chile)	Driss El Hadani (Morocco)	Susetyo Mulyodrono (Indonesia)
2004	Adigun Ade Abiodun (Nigeria)	Ciro Arévalo Yepes (Colombia)	Parviz Tarikhi (Islamic Republic of Iran)
2005	Adigun Ade Abiodun (Nigeria)	Ciro Arévalo Yepes (Colombia)	Parviz Tarikhi (Islamic Republic of Iran)
2006	Gérard Brachet (France)	Elöd Both (Hungary)	Paul R. Tiendrébéogo (Burkina Faso)
2007	Gérard Brachet (France)	Elöd Both (Hungary)	Paul R. Tiendrébéogo (Burkina Faso)
2008	Ciro Arévalo Yepes (Colombia)	Suvit Vibulsresth (Thailand)	Filipe Duarte Santos (Portugal)
2009	Ciro Arévalo Yepes (Colombia)	Suvit Vibulsresth (Thailand)	Filipe Duarte Santos (Portugal)
2010	Dumitru-Dorin Prunariu (Romania)	Nomfuneko Majaja (South Africa)	Raimundo González Aninat (Chile)
2011	Dumitru-Dorin Prunariu (Romania)	Nomfuneko Majaja (South Africa)	Raimundo González Aninat (Chile)
2012	Yasushi Horikawa (Japan)	Filipe Duarte Santos (Portugal)	Piotr Wolanski (Poland)
2013	Yasushi Horikawa (Japan)	Filipe Duarte Santos (Portugal)	Piotr Wolanski (Poland)
2014	Azzedine Oussedik (Algeria)	Diego Stacey Moreno (Ecuador)	Samir Mohammed Raouf (Iraq)
2015	Azzedine Oussedik (Algeria)	Rosa Olinda Vásquez Orozco (Ecuador)	Xinmin Ma (China)
2016	David Kendall (Canada)	Vladimir Galuska (Czech Republic)	Omar Shareef Hamad Eisa (Sudan)
2017	David Kendall (Canada)	Vladimir Galuska (Czech Republic)	Omar Shareef Hamad Eisa (Sudan)
2018	Rosa María Ramírez de Arellano y Haro (Mexico)	Thomas Djamaluddin (Indonesia)	Keren Shahar (Israel)
2019	André João Rypł (Brazil)	Thomas Djamaluddin (Indonesia)	Keren Shahar (Israel)
2020 ⁹	Marius-Ioan Piso (Romania)	Francis Chizea (Nigeria)	Nicolás Botero Varón (Colombia)
2021	Marius-Ioan Piso (Romania)	Francis Chizea (Nigeria)	Nicolás Botero Varón (Colombia)
2022	Omrán Sharaf (United Arab Emirates)	Jenni Tapio (Finland)	Oleg Ventskovsky (Ukraine)

⁹ No session was held in 2020 due to the COVID-19 pandemic. Decisions were taken by the Committee by written procedure.

Given the pre-rotational fixed-chair system which persisted until 1996, Austria has held the Chair the most times (36). The same numbers (36 each) for the Vice-Chair, held by Romania and the Second Vice-Chair/Rapporteur, held by Brazil are due to the same reason. After the switch to the rotational system, many more COPUOS members have played a leadership role in the Committee.

As of 2023, only 30 out of 100 States members of COPUOS have held one of the three Bureau positions on the main Committee. Taken together with the Bureau positions on the Subcommittees (one Chair each), as of 2023, only 37 out of 100 members of COPUOS have held a position on the Bureau of the Committee. The Subcommittee Chairs will be analyzed below in the respective chapters.

Commentators have suggested that the switch to a rotational bureau system might have impacted the productivity of the work of the Committee. As reasons they cite a varying degree of political interest by States holding bureau positions and a lack of familiarity of incoming Chairs with both the body of COPUOS and the subject matter. However, close examination of the outcomes of COPUOS over the years does not appear to bear this out. Additionally, it is important to consider that the rotational system allows for a more diverse representation of all regions and groups of State members of COPUOS. It also increases “ownership” of, and interest in, the Committee’s work by a larger number of States members, if their representatives serve as members of the Bureau.

Other commentators have also suggested that the formerly smaller number of members of COPUOS has contributed to increased productivity—because allegedly those were the only States that had a strong active interest in the work of the Committee. One commentator suggests that back in the 60s and 70s, the members of COPUOS sent high-ranking delegates to the Committee sessions, who had the influence to convince their governments to agree to/ratify what they had negotiated. This seems hard to assess objectively. One example pointing towards that direction is one of the early Austrian Chairs, who was a high-ranking diplomat and politician. Kurt Waldheim, the second chair of the permanent COPUOS, was the head of the Austrian permanent mission to the UN in New York. Between his two tenures as Committee Chair he served as Minister of Foreign Affairs of Austria. After his second tenure as Chair, he was elected to the office of the UN Secretary-General.

Most newly elected members of the Bureau have had prior experience representing their state on the Committee or its Subcommittees. Thus, they are somewhat familiar with the procedures and substance matter discussed in COPUOS. In any case, the Bureau relies on the expert support provided by UNOOSA as its Secretariat.

1.7 AGENDA DEVELOPMENT

Admission of New COPUOS Agenda Items

The work of COPUOS—the sharing of ideas and the exchange of views and suggestions for future work—is done in the format of agenda items for discussion, where delegations take the floor and address the Committee about specific issues related to the peaceful uses of outer space. New agenda items of the main Committee, or the two Subcommittees, may be proposed during a meeting of the respective Subcommittee or the main Committee. Consensus of all the member States is necessary in order for a new item to be added to the draft agenda of the Committee or one of its Subcommittees. The draft agenda is included in the report of the respective session. The final decision for the acceptance of a new agenda item is taken by the UN General Assembly, which usually endorses the recommendations by the Committee on its proposed agenda.

The UNGA also uses consensus or adoption without a vote as default procedure. However, if deemed necessary, the General Assembly may revert to majority voting on these issues. Theoretically, the General Assembly could “overrule” the Committee’s decisions on agenda. If, in its wisdom, the General Assembly rejects the agenda for the Committee or its Subcommittees without replacement, this would trigger a major issue as the Committee or affected Subcommittee could not meet the following year to deliberate on its proposed agenda items.

Development of the COPUOS Agenda

Historically, the COPUOS agenda went through several iterations and developed into its current form only in the late 1990s and early 2000s. The Committee’s early agenda contained items of a mostly procedural nature, with agenda items such as *Election of Officers*, *Opening Statement of the Chair*, and related procedural topics. During the first two decades of COPUOS’s existence, first all and later most of the substantive issues the Committee dealt with, were considered under the agenda items on the adoption of the reports of the Subcommittees. This slowly started to change in the mid- to late 1980s with the addition of new permanent and substantive agenda items, such as *Ways and Means of Maintaining Outer Space for Peaceful Purposes*, and *Spin-Off Benefits of Space Technology: Review of Current Status*.

Upon a proposal submitted in 1999 in a Working Paper from the German delegation on behalf of several States, the Committee and its Subcommittees now use three categories of agenda items:

1. **Regular items** (on the agenda permanently, until removed from the agenda by consensus or by the UN General Assembly’s vote);

2. **Items under a multi-year-workplan**, which are placed on the agenda for a limited number of years, with a clear predetermined workplan lasting for a set number of years. Those agenda items may be either extended under their current workplans, recreated under new workplans or recreated as single issues/items. For either of these options, consensus is required in the Committee. Otherwise, they automatically are removed from the agenda after their multi-year workplan expires; and
3. **Single issues/items**, which are placed on the Committee's agenda for one year only, based on the previous year's decision of the Committee by consensus, or by the UNGA based on consensus or majority vote. They are automatically removed from the Committee's agenda after one year, subject to annual renewal by the Committee, as endorsed by the UNGA.

Agenda items are discussed concurrently, usually three agenda items scheduled for deliberation during each meeting. With the exception of *General Exchange of Views* and *Report of the Committee to the United Nations General Assembly*, all other substantive agenda items are usually opened for deliberations during three consecutive meetings of the Committee.

Discontinued COPUOS Agenda Items

Historically, the COPUOS agenda included a wide range of procedural and substantive items, which were introduced to the agenda under varying names, and only over time consolidated into today's procedural agenda items. Discontinued substantive agenda items include the following:

- *Question of the Establishment of International Rocket Sounding Facilities* (1963-1965)
- *Reports by the International Telecommunication Union (ITU) and World Meteorological Organisation (WMO)* (1965-1966)
- *Report of the Working Group of the Whole* (1966)
- (Several agenda items concerned with the planning and preparations for and the implementation of the recommendation made by the three UNISPACE conferences and the UNISPACE+50 High Level Segment) (1967-1968; 1977-1979; 1983-1997; 1997-1999; 2001-2012; 2018)
- *Report of the Working Group on a Navigation Services Satellite System* (1967)
- *Report of the Working Group on Direct Television Broadcast Satellites* (1969-1970; 1973-1974)
- *Applications of space science and technology and activities in outer space* (1979-1980)
- *Programmes and Activities relating to outer space in the UN* (1979-1980)
- *Elaboration of a draft set of principles governing the use by States of artificial Earth satellites for direct television broadcasting* (1982)
- *Commemorative Meeting on International Space Year* (1992)

- *Space and Society (2002-2012)*
- *Recommendations of the World Summit on the Information Society (2006)*
- *International cooperation in promoting the use of space-derived geospatial data for sustainable development (2007-2010)*

1.8 CURRENT AGENDA ITEMS

For illustrative purposes, in this section, we present an indicative list of the current agenda items in COPUOS, along with a brief description of each item. The example provided in this section is drawn from the agenda of COPUOS for the 2022 session. Some time before the start of a session of COPUOS or one of its Subcommittees, OOSA issues an Annotated Provisional Agenda in all official languages of the UN which contains the agenda and a brief description of the mandate for the coming session under this agenda item, any relevant decisions from previous sessions, as well as all relevant document references citing all relevant paragraphs. This document is extremely helpful to prepare for an upcoming session.

1. Opening of the Session

While previously not consistently listed as a separate agenda item, this simply denotes the formal opening of each Committee session. During transition years, the outgoing Chair presides over the first two items of the agenda before passing the position to the new chair.

2. Adoption of the Agenda

While previously not consistently listed as a separate agenda item, this simply denotes the formal adoption by the Committee of its agenda for the ongoing session. This is done in accordance with the proposed agenda that had been included in the previous session's report, which was endorsed and approved by the General Assembly in its annual outer space resolution of the previous year.

3. Election of Officers

Since the full switch to a two-year rotational Bureau system in 2004, the election of officers agenda item only appears on the Committee's agenda every other year. An exception to this schedule would be unscheduled vacancies or the "sharing"/splitting-up of a bureau rotation period in order to reach consensus on these decisions.

4. Statement by the Chair

This item has been on the Committee's agenda since 1964. At some point after the opening of the session and some procedural issues, the Chair delivers an extensive statement, carefully drafted with the support of the Secretariat. In it the Chair welcomes the delegations, often mentions important substantive issues or practical information for the current session and also gives an overview of the work of the Subcommittees that

year and, if appropriate, other space-related activities, especially within the UN system. Depending on the Chair, this statement can also contain the goals of the Chair for a given meeting, and an appeal to delegations for their support to achieve those goals.

5. General Exchange of Views

This agenda item, on the Committee's agenda with few exceptions since 1963, allows members and observers to report broadly on their activities during the past year and any other recent developments of relevance to the mandate of the Committee. Several statements also touch on other specific agenda items. It is usually the agenda item that has the most speakers (both from States members of COPUOS as well as from observers). It is also scheduled for several days, rather than the usual three sessions given to other agenda items. During the first meeting of the session considering this agenda item, the Director of UNOOSA also makes a statement on the work of the Office. As a matter of practice, most States use the General Exchange of Views statement to set out their top-level positions on matters of particular importance to them in the agenda, and then deliver more detailed statements elaborating on their positions under the respective agenda items.

6. Ways and Means of Maintaining Outer Space for Peaceful Purposes

This agenda item has been a regular item on the agenda of the Committee since 1984. Under this agenda item, statements are made on ways and means of maintaining outer space for peaceful purposes and associated matters that would be instrumental in ensuring the safe and responsible conduct of space activities. This includes ways to promote international, regional, and interregional cooperation to that end. Statements are made emphasizing the need for further cooperation in this area and what relationship, if any, COPUOS should have with other UN and international bodies, which are addressing the issues of space security and the prevention of an arms race in outer space. Often statements elaborating on the choice of instruments to achieve greater space security are made, such as treaties, best practice guidelines, or transparency and confidence-building measures. There is an ongoing disagreement between members of the Committee, mentioned above with respect to the Committee's mandate, as to what degree the Committee should deliberate issues of space security and militarization.

7. Report of the Scientific and Technical Subcommittee on its [...] Session

This agenda item has been on the agenda of the Committee since 1963 (with two exceptions when the STSC was not in session and the short-lived restructuring of the Committee's agenda from 1979–1980). It contains the deliberations of the current year's session of the STSC, which will have taken place in February of that year. Since the main Committee's

agenda also includes many substantive agenda items, the annual reports of the STSC and the LSC are usually endorsed without much discussion. Before that, almost all substantive deliberations by the Committee were made under the agenda items on the deliberation/adoption of the reports by the two Subcommittees.

8. Report of the Legal Subcommittee on its [...] Session

This agenda item has been on the agenda of the Committee since 1963 (with the exception of the short-lived restructuring of the Committee's agenda from 1979–1980). It contains the deliberation of the current year's session of the LSC, which will have take place during March or April of that year. Since the main Committee's agenda also includes many substantive agenda items, the annual reports of the STSC and the LSC are usually endorsed without much discussion. Before that, almost all substantive deliberations by the Committee were made under the agenda items on the deliberation/adoption of the reports by the two Subcommittees.

9. Space and Sustainable Development

This item has been on the Committee's agenda since 2013, partially as a successor to the previous Space and Society agenda item (2002–2012). This item allows States to express their views and share information on how space technology and applications may enhance policies on a broad spectrum to implement the UN Sustainable Development Goals (SDGs). This includes areas, such as environmental protection, land and water management, urban and rural development, marine and coastal ecosystems, health care, climate change, disaster risk reduction and emergency response, energy, infrastructure, navigation, seismic monitoring, natural resources management, snow and glaciers, biodiversity, agriculture and food security.

10. Spin-off Benefits of Space Technology: Review of Current Status

This item has been on the Committee's agenda since 1989. It allows the consideration and sharing of information on technologies, which were originally developed for space activities, but had been adapted by/ for other non-spatial industries, programs and policies as well. NASA produces an annual report summarizing current developments in this respect, which is presented for the consideration of the Committee.

11. Space and Water

This item has been on the Committee's agenda since 2004. This item allows for the consideration of ways how space applications and data derived from them may be used to enhance policies and practical programs relating to water. These include for example the use of remote sensing data to predict and counter storms, floods, and droughts. The winners of the annual Prince Sultan bin Abdulaziz International Prize for Water are usually announced during this agenda item.

12. Space and Climate Change

This item has been on the Committee's agenda since 2009. This item deals with the exchange of information on how data acquired through the use of space applications, such as remote sensing and weather satellites may aid in better understanding and tackling climate change. This includes the potential support space-based data can render to the implementation of the Paris Agreement and Sustainable Development Goal 13, on climate action. This item does not usually discuss the effects of space activities on Earth's climate.

13. Use of Space Technology in the United Nations System

This item has been on the Committee's agenda since 2009. Under this agenda item, information may be shared and discussed on the various UN programs and entities, using space technology and applications, with a special emphasis on the reports of UNOOSA's Programme on Space Applications and the annual UN-Space reports. The activities reported therein range from the use of space technology for disaster relief within UN SPIDER to the use of satellite imagery by the UN Security Council to monitor the implementation of ceasefire agreements (more information on these may be found in section 1.14 - *The United Nations Office for Outer Space Affairs*).

14. Future Role and Method of Work of the Committee

This item has been on the Committee's agenda since 2011. This item allows for all discussions relating to proposed changes to the role, mandate, and methods of work of the Committee. This item often includes discussions on whether and how to reform rules of procedure or membership of the Committee. While many interesting ideas have been proposed, only minor changes (e.g., limiting the length of statements, introduction of a countdown timer for statements) have so far been enacted.

15. Space Exploration and Innovation

This agenda item has been on the Committee's agenda since 2019. The item allows for the discussion of and sharing of information on programs of space exploration and related innovation, with a special focus on human space flight beyond Low Earth Orbit (LEO). It furthermore seeks to facilitate deliberations on how space exploration serves as a driving force for innovation within space activities and beyond.

16. "Space2030" Agenda

This agenda item has been on the Committee's agenda since 2019. Originally about drafting the "Space2030" Agenda for sustainable development, it is now concerned with monitoring the implementation of the Agenda as adopted by UNGA Res 76/3 on 25 October 2021. The "Space2030" Agenda provides how outer space activities contribute to

the achievement of the UN Sustainable Development Goals, the Paris Agreement on Climate Change, and the Sendai Framework for Disaster Risk Reduction, the broad societal benefits of such activities, and the essential role of space technologies and applications and space-derived data in furthering economic growth and prosperity for the international community. The Agenda was developed first in preparation of UNISPACE+50 in 2018 and then within a dedicated Space2030 Working Group until the passage of the General Assembly resolution in 2021.

17. Other Matters

This item has been on the Committee's agenda since 1972. It provides the space for deliberation of a variety of procedural and other matters not discussed under a separate agenda item of the Committee. It mainly includes the Committee's recommendations to the UNGA concerning the nominations of new members of the bureau of the Committee, new members and observers, the proposed program plan, including the budget, for the following year's UN Programme 5: Peaceful Uses of Outer Space, and the draft provisional agenda for the following year's session of the Committee.

18. Report of the Committee to the General Assembly

This item has been on the Committee's agenda since its first session. It is usually scheduled for two full days. While the respective parts of the report on this agenda item usually are very brief, these deliberations take a lot of time, as consensus is required on each paragraph of the draft report in each of the six official languages of the UN. It is the major responsibility of the Chair to reach consensus on this lengthy document that has been prepared by the Secretariat to the Committee.

1.9 MAJOR DELIVERABLES AND OUTCOMES

From an international space governance perspective, the most significant outputs of COPUOS have been the five legally binding United Nations treaties on outer space, developed and adopted successively over a 22-year period from 1967 to 1979. These five treaties have been supplemented by a host of principles, guidelines, and other soft law documents, which have been adopted or endorsed by the UNGA in legally non-binding resolutions. These soft law instruments nevertheless provide important best practices and may serve as evidence of current or emerging rules of customary international law on space activities. Below is a list and short description of the treaties and most important resolutions.¹⁰

¹⁰ Each year, UNOOSA publishes an updated list of signatures and ratifications of the treaties by States: <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/status/index.html>.

The Outer Space Treaty

The Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (“Outer Space Treaty”) entered into force in 1967. The treaty provides the basic legal framework for outer space activities. While many of its provisions are similar to the Legal Principles Declaration (see below), this document is legally binding upon the States that have ratified it. It establishes the basic principles for human space activities, such as freedom of exploration and use for the benefit of all countries; the applicability of international law in outer space and certain limited restrictions on military uses of outer space; the special status of astronauts; ownership of and jurisdiction over objects launched into outer space; the rules for responsibility and liability for space activities and several norms on cooperation, consultation, and due regard. The Outer Space Treaty is the most successful and most widely accepted of the five UN treaties.

As of 2023, there are 113 States parties to the treaty and 23 more States have signed it. There are differing opinions among COPUOS member States as to which of its provisions also constitute customary international law, if any. The Outer Space Treaty has been referred to as the “Magna Carta of space law” because the four subsequent space treaties all elaborate on some of the provisions contained in the Outer Space Treaty.

The Rescue Agreement

The Agreement on the Rescue of Astronauts, the Return of Astronauts and Return of Objects Launched into Outer Space (“Rescue Agreement”) entered into force in 1968. This treaty elaborates on issues regarding the status of astronauts, and the obligations to provide assistance to astronauts in distress and to return them as well as crashed space objects

to the launching state. As of 2023, there are 99 States parties to this treaty and 23 more States have signed it. Furthermore, three international intergovernmental organizations have given declarations to accept the rights and obligations under the treaty.¹¹

The Liability Convention

The Convention on International Liability for Damage Caused by Space Objects (“Liability Convention”) entered into force in 1972. This treaty elaborates on the liability for damage caused by objects launched into outer space. The launching state of a space object bears liability for damages caused by it. In contrast to the Outer Space Treaty, it divides cases of liability into (1) damage caused on the surface of the Earth or to an aircraft in flight (absolute/no-fault liability), and (2) damage caused in outer space (fault-based liability). As of 2023, there are 98 States parties to this treaty and 19 more States have signed it. Furthermore, four international intergovernmental organizations have given declarations to accept the rights and obligations under the treaty.

The Registration Convention

The Convention on the Registration of Objects Launched into Outer Space (“Registration Convention”) entered into force in 1976. This treaty details the obligation of States parties to keep a national register of space objects, of which they are launching States and to also register them with the UN Secretary-General, as represented by UNOOSA. As of 2023, there are 75 States parties to this treaty and three more States have signed it.¹² Furthermore, four international intergovernmental organizations have given declarations to accept the rights and obligations under the treaty.

¹¹ Only States may become parties to the five UN space law treaties. However – except for the Outer Space Treaty – all four other UN space law treaties nevertheless allow international intergovernmental organizations to declare themselves to be bound by the respective treaty’s provisions. These organizations then have similar rights and the same obligations as States parties to the treaty. The European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), the European Space Agency (ESA) and the Intersputnik International Organization of Space Communications have made such declarations under the Rescue Agreement, the Liability Convention and the Registration Convention. The European Telecommunications Satellite Organization (EUTELSAT) made such a declaration under the Liability Convention and the Registration Convention. Even though the Outer Space Treaty is thus not binding on these international organizations directly, they may be bound indirectly as their member States have to abide by their own treaty obligations when acting within the framework of the organization.

¹² It is worth noting here that States that are not parties to the Registration Convention are nonetheless encouraged to register voluntarily their space objects with the United Nations under GA Resolution 1721(XVI) B that “Calls upon States launching objects into orbit or beyond to furnish information promptly to the Committee on the Peaceful Uses of Outer Space, through the Secretary-General, for the registration of launchings”

The Moon Agreement

The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (“Moon Agreement”) entered into force in 1984. This treaty regulates the subset of space activities conducted on the Moon and on other celestial bodies. It repeats and elaborates on many rules also found in the Outer Space Treaty. The Treaty addresses the utilization of resources of celestial bodies and makes reference to an international framework to do so. The treaty itself, however, does not provide the framework, but merely calls upon the States parties to establish an international regime to govern the exploitation of lunar resources “as such exploitation is about to become feasible.” There are also other provisions in the Moon Agreement that differ from and go significantly beyond what some States consider to be their obligations under the Outer Space Treaty. As of 2023, there are 18 States parties to this treaty and four more States have signed it.

Table 1.5 | Ratification Status of the UN Treaties on Outer Space (as of 2023)

Outer Space Treaty	113
Rescue Agreement	99
Liability Convention	98
Registration Convention	75
Moon Agreement	18

United Nations Principles and Other Non-legally Binding Soft Law

COPUOS has also been the forum for the development of various non-legally binding instruments addressing activities in outer space, both before and after the era of treaty making in the 1960s and 1970s. Major outcomes include:

- UNGA Res 1721 A and B (XVI) of 20 December 1961, *International cooperation in the peaceful uses of outer space*
- UNGA Res 1962 (XVII) of 13 December 1963, *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space* [“Legal Principles Declaration”]

- UNGA Res 37/92 of 10 December 1982, *Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting* ["Broadcasting Principles"]¹³
- UNGA Res 41/65 of 3 December 1986, *Principles Relating to Remote Sensing of the Earth from Outer Space* ["Remote Sensing Principles"]
- UNGA Res 47/68 of 14 December 1992, *Principles Relevant to the Use of Nuclear Power Sources in Outer Space* ["Nuclear Power Source Principles"]
- UNGA Res 51/122 of 13 December 1996, *Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries* ["Benefits Declaration"]
- Paragraph 4 of UNGA Res 55/122 of 8 December 2000, *International cooperation in the peaceful uses of outer space* (note: this Resolution addresses the use of the geostationary orbit orbit)
- UNGA Res 59/115 of 10 December 2004, *Application of the concept of the "launching State"*
- UNGA Res 62/101 of 17 December 2007, *Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects*
- UNGA Res 68/74 of 11 December 2013, *Recommendations on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space*
- UNGA Res 62/217 of 22 December 2007, *Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space* ["COPUOS Space Debris Mitigation Guidelines"]
- Safety Framework for Nuclear Power Source Applications in Outer Space (endorsed by COPUOS at its 52nd session and contained in A/AC.105/934)
- UNGA Res 74/82 of 13 December 2019, *Guidelines for the Long-term Sustainability of Outer Space Activities* ["LTS Guidelines"]

¹³ No consensus could be reached in COPUOS on the 1982 Broadcasting Principles, largely because of the opposition by western States. This is the only set of UN principles on space law and governance originating in COPUOS that were passed by a majority vote in the UN General Assembly after not achieving consensus in COPUOS. This considerably limited their effectiveness and also their reliability as evidence of a possible emerging norm of customary international law.

Treaty Development

The major issues addressed in the five space treaties have been on the agenda of COPUOS and its Subcommittees largely from the very beginning, as evidenced by the early Legal Principles Declaration in 1963. From the very beginning, COPUOS considered drafting new legally binding instruments, to thereafter be presented to the General Assembly, and later to be opened for state ratification. The drafting of these treaty texts took differing spans of time:

The Outer Space Treaty: While envisioned by the Committee at least since 1964, the actual drafting of the text of the Outer Space Treaty took place between May/June 1966 and December 1966.

The Rescue Agreement: Draft proposals on assisting astronauts in distress and returning incidentally landed space objects had been debated in the Committee since 1962. However, it was only after the first human casualties of space flight occurred in 1967 that a draft treaty was agreed upon in COPUOS and eventually adopted by the UNGA within several weeks.

The Liability Convention: The topic of liability for damages caused by human-made space objects had been debated in the Committee and its subsidiary bodies since 1962, which also marks the year of the first draft proposals on such a treaty by States members of COPUOS. However, it took several years until the Committee formally insisted that the Legal Subcommittee should strengthen its efforts to draft a treaty in 1970. The draft convention was agreed upon in COPUOS and adopted by the UNGA by the end of its 1971 session.

The Registration Convention: The issue of international registration of objects launched into outer space had been on the agenda of the Committee since the 1959 session of its *ad hoc* predecessor. An early UNGA resolution contained the first call on UN Member States to register their objects. Work on actual proposals for a specialized convention started in 1968 and concluded with the adoption of the text of the draft treaty in 1974.

The Moon Agreement: The drafting of the Moon Agreement lasted from the first proposal by Austria in 1973 to the final adoption of the text by COPUOS by consensus after extensive informal consultations in 1979. The COPUOS report of its session in 1979 also contains several understandings (paras. 55-65) by the Committee on the meaning of several provisions of the Moon Agreement, which are considered legally binding authoritative interpretations.¹⁴

¹⁴ A/34/20

1.10 SCHEDULE

Schedule and Tempo of COPUOS Discussions

Sessions of the main COPUOS committee typically last for one-and-a-half weeks (eight days) and run from the Wednesday of the first week through to the Friday of the following week. The sessions are conducted at the UN in Vienna, Austria. The Committee's daily work is split into two meetings per day (10:00–13:00 and 15:00–18:00). Typically three agenda items are discussed per meeting. Agenda items stay open for a few days before being closed.¹⁵

The practice of staggering the discussions of agenda items allows for more flexibility for the delegations, who may not be able to otherwise attend the deliberation of all desired agenda items and the Working Group meetings, which are often conducted at the same time as the meetings of the whole Committee. Furthermore, this makes it easier for delegations to schedule a statement to be delivered by an ambassador or other high-ranking member of the delegation with limited availability. In general, statements delivered by heads of States or government (theoretically), other senior members of a member state's government and ambassadors are given precedence in scheduling. Otherwise the statements are scheduled on a first-come, first-served basis per agenda item per meeting of the Committee.

To schedule a statement, delegations must contact the Secretariat of the Committee in advance of the session or in the meeting room shortly before or during the meetings. Though not required to do so, the Secretariat officers appreciate receiving printed copies of the statement to be delivered in advance as these can be helpful for the interpreters who have to translate the statement in real time into the five other official UN languages as it is being delivered by the speaker. Speakers should bear this real-time translation in mind as they prepare the text of their statements, and they should deliver their statement at a measured pace that allows the interpreters to keep up with them.

Most statements are carefully prepared in advance, but often *ad hoc* interventions are also made. States members delegations may also request the floor from the Chair by making an *ad hoc* intervention at any time. If a member State delegation believes that a statement made by another delegation is insulting, or that it contains misleading or

¹⁵ This is the traditional, pre-COVID format of the COPUOS sessions. Because of restrictions on in-person meetings during the COVID-19 pandemic, the Secretariat organized entirely virtual, and then later hybrid meetings with very limited in-person attendance. Before the COVID-19 pandemic, meetings would last for three hours, which was then shortened to two hours, because of the hybrid meeting format (i.e., both in-person and virtual participation possible) employed in 2021 and 2022.

factually incorrect references to a program or activity directly associated with them, they have the Right of Reply. The presenter of the original statement is permitted, if requested, to clarify their intervention. Points of order can be raised by a member State at any point in the meeting if the representative of that State believes that the Chair is not following the Rules of Procedure or not ensuring others do so. Despite the lack of any explicit rule stating so, it does not presently appear that observers enjoy the Right of Reply, or the right to raise points of order.

Technical Presentations

Technical presentations are an important part of the Committee's meetings and one of the main ways that States share information on their space activities. These presentations are held by members of state or observer delegations, usually on scientific, technical, capacity-building or other related topics. They are scheduled after the consideration of the respective agenda items of the meeting and presented at the end of each meeting. They are thus delivered in the main Committee meeting room, with translation. Presentations may be delivered by States members or observers of the Committee or UNOOSA. They may be delivered on any issue within the mandate of the Committee and are usually scheduled via the Secretariat ahead of the session. Just as with statements during the meeting, the Committee sets a limit for the duration of individual presentations as well as the maximum number of presentations per meeting. Interpretation services will be provided during the scheduled meeting times and subject to the maximum duration restrictions of interpreters' work shifts. Ideally, technical presentations will be scheduled for one of the meetings during which the respective agenda items they concern are being considered by the Committee. However, due to the disparate distribution of the topics of technical presentation among the agenda items, the schedule may deviate from this guideline.

Side Events

Delegations of States members or observers and other entities may conduct side events on the margins of the Committee meetings. These are often used in a similar manner as technical presentations to highlight aspects of national or institutional space programs and research or to informally discuss issues on the agenda of the Committee. In distinction to scheduled technical presentations delivered in the meeting room within the scheduled hours of the meetings, these side events are conducted in-between or after the two daily meetings. Thus interpretation services are not available for such side events, even if they are held in the main Committee meeting room.

1.11 CONSENSUS AND RULES OF PROCEDURE

Consensus in COPUOS

On March 19, 1962, COPUOS was the first body in the United Nations to formally adopt the consensus procedure when the Chair at the time, Ambassador Franz Matsch of Austria, stated

"I should like to place on record that through informal consultations it has been agreed among the members of the Committee that it will be the aim of all members of the Committee and its sub-Committees to conduct the Committee's work in such a way that the Committee will be able to reach agreement in its work without need for voting."¹⁶

Definition of Consensus

A clear definition of consensus is subtle. According to the Max Planck Encyclopedia of International Law:

From a procedural point of view, consensus is a procedure for adopting a decision or a statement without proceeding to a formal vote when there are no formal objections. Nobody involved in that decision-making process has to manifest positively its agreement with the decision to be taken; the only requirement is that no formal objection is voiced. Consequently, a General Assembly resolution adopted by consensus is not necessarily accepted by all members. Rather, it is simply not rejected by any members.¹⁷

Decisions taken through consensus are different from the practice of adoption without a vote. The deliberation of a decision based on consensus begins by referring to a statement, document, or paragraph thereof and, upon no formal objection being voiced, the officer of the Bureau leading

¹⁶ UN Doc. A/AC.105/OR.2, 19 March 1962, at 5. See also UN Doc. A/518I, of 27 September 1962, at 3–4.; see also B. Cheng, *The UN and the Development of Space Law in Studies in International Space Law*, p. 163 (1997); and R. Wolfrum & J. Pichon, *Consensus*, in MP EPIL, available at: <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1387?prd=MPIL>, para 10 [last updated Oct. 2010]; and P. Jankowitsch, *The Background and History of Space Law in F. v.d. Dunk et al (eds.), Handbook of Space Law*, p. 11-12 (2015)

¹⁷ R. Wolfrum & J. Pichon, note 16 *supra*.

the deliberation proclaims “it is so decided.” The proposition in question is thereafter considered adopted.

The often proclaimed advantage of the consensus procedure is the higher degree of support by the participants in the deliberations, and a more comprehensive compromise. This is often credited as leading to the high degree of acceptance of many of the Committee’s drafted principles and most of its draft treaties.

On the other hand, because COPUOS works on a consensus basis, and there is no default mechanism for adoption by a majority vote, effectively every member of the Committee has a quasi-veto right. This can slow down deliberations at COPUOS. Decision-making by consensus also requires extensive preliminary consultations, which must occur “off the record” during informal consultations (whether scheduled or not), or in the informal discussions in the Working Groups.

Meanwhile, the UN General Assembly has the power to adopt by a majority vote any draft that has failed to achieve consensus in the Committee. The only example for such a choice was the adoption in UNGA resolution 37/92 on Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting, on 10 December 1982. This decision by the UNGA effectively overruled the objections and abstentions of most western industrialized States at the time. As a consequence, some say that the value of these Principles as a potential reflection of an emerging norm of customary international law or commonly accepted best practice was undermined.

Some commentators believe COPUOS consensus rule constrains the ability of the Committee to maintain its relevance and effectiveness in a rapidly changing global space environment. It is disputed whether the Committee may legally deviate from its cardinal decision-making rule without achieving consensus on the very need to change this rule. Several major space powers and other members of the Committee appear to hold the view that such a decision by the Committee would be undesirable. The reluctance of other bodies in the UN system to formally adopt consensus as a working method—despite using it preferentially in practice—is claimed to reflect this uncertainty.¹⁸ Lastly, the often-cited “Vienna Spirit” and the wide acceptance of most of COPUOS’s deliverables are important practical obstacles to revising the consensus rule.

¹⁸ R. Wolfrum & J. Pichon, note 16 supra, para. 10.

Table 1.6 | UN Document Series and Types

Document Series	Description
A/-	General Assembly Documents
A/RES/-	General Assembly Resolutions
A/C.1/-	Documents of the First Committee (General Assembly)
A/SPC/-	Documents of the Special Political Committee (General Assembly)
A/C.5/-	Documents of the Fifth Committee (General Assembly)
A/AC.105/-	Documents of the Committee on the Peaceful Uses of Outer Space
A/AC.105/C.1/-	Documents of the Scientific and Technical Subcommittee
A/AC.105/C.2/-	Documents of the Legal Subcommittee
ST/-	Secretariat-General Documents
ST/SPACE/-	Documents issued by the Office for Outer Space Affairs (such as its annual reports)
-/L. ...	Limited Distribution
-/CRP. ...	Conference Room Papers
-/WP....	Working Papers
-/SR. ...	Summary Records
-/PV. ...	Verbal Transcripts
-/Add. ...	Addendum to a previously issued document
no symbol	e.g. "non-papers," which serve as unofficial basis for discussion

1.12 DOCUMENTATION

Document Codes

Each session of COPUOS generates a wide range of documentation. Each document is assigned to one of the UN document series listed in the table provided. Within each document series, a set of document descriptors identifies what kind of document it is.

Until 1985, the main Committee and the Legal Subcommittee had verbatim records, called *procès-verbale* [abbr. PV], of its sessions, emphasizing their importance. Due to budgetary constraints, this practice was switched to summary records from 1986 onwards. Prior to 2020, documents submitted for consideration by the Committee or otherwise created during and related to a Committee session were made available by the Secretariat in hard copy via Conference Services officers with the UN Offices Vienna (UNOV) and digitally on the UNOOSA website.

Since 2020, all documents are now posted on the UNOOSA web site in digital form only.¹⁹

A code is assigned to an individual document by UNOOSA in coordination with the UN Document Service, in accordance with the rules expressed in Table 1.6. For example, the first part of all COPUOS documents, *A/AC*, refers to the fact that COPUOS is a subsidiary organ of the General Assembly (A) and was first created as an *ad hoc* committee (AC). While it is no longer an *ad hoc* body since 1959, the document code for *ac hoc* committees continues to be used.

Documents issued by UNOOSA bear a different code (ST/SPACE). In these, ST stands for Secretariat, as UNOOSA is a subsidiary body of the UN main organ Secretariat-General, SPACE simply denotes UNOOSA. This code is used for example for the UNOOSA annual report or other publications, such as the booklet containing all important UN space treaties and resolutions.

Within these document series, individual documents can be one of several types, denoted by one of the descriptors listed in the bottom half of Table 1.6. One important document category is Conference Room Papers (CRPs). These are generally used to distribute all sorts of information to the delegations that have been submitted to the Secretariat before or during the current session of the Committee. This includes for example membership applications to COPUOS, reports by members and observers on certain space related activities and replies to questionnaires prepared by working groups.

Working Papers (WPs), usually contain proposals for future work or proposals for resolutions, reports, or other texts, officially submitted by one or more States members. They may, however, also be published with *-/CRP. ...* or *-/L. ...* document codes. Non-papers are unofficial bases for discussion, submitted by one or more States members or COPUOS officers, such as Subcommittee or Working Group Chairs/Bureaus. As they are not official statements or submissions, they are not assigned a document code. They are, at least in part, also placed on the UNOOSA website.

1.13 STRUCTURE AND COMPONENTS OF SAMPLE COMMITTEE REPORTS

The Secretariat of the Committee, which comprises officials in the United Nations Office for Outer Space Affairs (UNOOSA), drafts the reports of the Committee and its Subcommittees concurrently while

¹⁹ The United Nations Office for Outer Space Affairs, www.unoosa.org

the Committee is meeting. Consequently, the draft report is made available by the Secretariat in installments in all official languages as the Committee concludes its deliberation of each respective agenda item. The document numbers of draft reports are made available under the limited distribution document series of the Committee (e.g., A/AC.105/L.... and A/AC.105/L..../Add....).

During the deliberation of the agenda item *Adoption of the report of the Committee*, members of the Committee, but not observers, may make statements requesting changes to the text of the draft report until the Committee reaches consensus. The process for the consideration of the draft report moves paragraph by paragraph. The reports of the Committee can broadly be separated into three parts: Introduction, Recommendations and Decisions, and Annexes.

Introduction

The Introduction section of the report records the meetings the Committee and its Subcommittees have held during the present year. It also states the composition of the membership and observers to the Committee during the current session and their attendance. It furthermore records the deliberations of the Committee under several of its mostly procedural agenda items, such as the formal opening of the session and the opening statement by the Chair, the election of officers/the Bureau of the Committee, the adoption of the session's agenda, the adoption of the Committee's report to the UNGA as well as the statements made under the General exchange of views. The Introduction section closes with the formal record of adoption of the report containing the recommendations and decisions set out in the rest of the document.

Recommendations and Decisions

The Recommendations and Decisions section encompasses a summary of the content of the deliberations of the Committee on all of its remaining (mostly substantive) agenda items. The individual subchapters refer to the preceding year's UN General Assembly resolution establishing or continuing the respective agenda item. They then continue to list all members of and observers to the Committee that made statements under a given agenda item, as well as all documents before the Committee and technical presentations given relating to the respective agenda item. After these uniform procedural parts, the subchapters record in summary the views expressed during its deliberation on the agenda item.

It should be noted that all views and statements are described without attribution in the report. However, there is a standard formula that is used to indicate how many delegations have expressed a certain view or position.

In order of increasing support, the following phrases are used: The phrase “The view was expressed...” indicates that the statement concerned was made by only one member of the Committee.

The phrase “Some delegations expressed the view...” indicates that more than one member State either directly stated or expressed support for a given view. This however does not signal support expressed by the Committee as a whole.

Where a view is shared by the Committee as a whole, this is expressed with the phrase “the Committee agreed...” while consensus decisions of the Committee are expressed with the phrases “the Committee decided...” or “the Committee agreed....”

The sections of the report dealing with the agenda items for consideration of each Subcommittee’s annual report are split up into sub-chapters, in accordance with the agenda items of the Subcommittees.

The final chapter of the Recommendations and Decision part of the report is the broad procedural item *Other Matters*. Among other small matters, this section usually includes recommendations by the Committee to the General Assembly relating to granting membership or observer status to new entities, as well as the agenda, schedule of sessions and (biannually) the composition of the bureau of the Committee and its subsidiary bodies for the following session/two-year period..

Annexes

In the past, annexes to the Committee report used to contain also the Subcommittee reports, which are now merely referenced, but issued as separate documents. The annexes may contain various kinds of draft documents the Committee has considered and adopted, such as draft resolutions to be proposed to the UNGA for endorsement, reports of Working Groups established directly under the main Committee or Subcommittees or other documents such as terms of reference of workplans for Working Groups.

One recent example of this is the set of 21 Guidelines for the Long-term Sustainability of Outer Space Activities, which were drafted by a Working Group of the STSC and are contained in Annex II to the COPUOS report on its 62nd session in 2019 (A/74/20).

1.14 THE UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS

History

The origins and evolution of The United Nations Office for Outer Space Affairs (UNOOSA) have been closely connected to the history of COPUOS.

The earliest predecessor of what today is UNOOSA was a small group of experts within the UN Secretariat in New York, assembled in 1958, to provide secretariat services to the *ad hoc* Committee. From 1962, this group of experts operated under the Department of Political and Security Council Affairs, called the Outer Space Affairs Division from 1968 onwards.

After being remodeled into a separate Office for Outer Space Affairs in 1992, the unit was moved to the United Nations Office at Vienna (UNOV) in 1993. By that time, the Committee and both of its Subcommittees had started holding all of their sessions exclusively in Vienna. In a logical step when moving to Vienna, the new OOSA also took over the role of serving as secretariat for the Legal Subcommittee, which had previously been discharged by the UN Secretariat's Office of Legal Affairs in New York.

Structure

OOSA is headed by a Director, who in discharging their duty as Director is assisted by the Office of the Director and a senior advisor on space science and education. Besides the Office of the Director, UNOOSA consists of three more major sections: The Committee, Policy and Legal Affairs Section (CPLA); the Space Applications Section (SAS); and UN-SPIDER. The Committee, Policy and Legal Affairs Section is responsible for serving as the secretariat to COPUOS and its subsidiary bodies. Additionally, it fulfills all functions pertinent to providing legal advice to the director of UNOOSA and is responsible for drafting agreements to be concluded with third parties. The Space Applications Section is responsible for conducting the UN Programme on Space Applications and several other smaller programs. UN-SPIDER, the only part of UNOOSA having several offices in addition to one in Vienna (Bonn, Beijing), is explained in more detail below. Furthermore, there is an executive Secretariat of the International Committee on Global Navigation Satellite Systems (IC GNSS).²⁰

Both in terms of the size of its budget as well as the number of its staff, UNOOSA is among the smallest offices in the UN Secretariat. As of 2021, UNOOSA had a regular budget of \$4,025,283 USD and extra-budgetary financing of \$1,166,450 USD.²¹ In 2021, the staff of 23 staff members was funded out of UNOOSA's regular budget, with 14 more personnel on loan from Member States funded from extra-budgetary sources or similar arrangements. The work of UNOOSA is also supported by a number of unpaid interns throughout all of its sections. Similar to many other

²⁰ The current mandate and structure of the Office has been promulgated in: *United Nations Secretary-General's Bulletin: Organization of the Office for Outer Space Affairs, ST/SGB/2020/1*

²¹ UNOOSA, Annual Report 2021, https://www.unoosa.org/documents/pdf/annualreport/UNOOSA_Annual_Report_2021.pdf

UN offices and entities, UNOOSA's regular budget has remained largely steady since 2010. To fund and conduct additional programs or enlarge existing ones, UNOOSA depends mostly on voluntary contributions by Member States or non-governmental entities. COPUOS deliberates annually on UNOOSA's budget, which is then recommended to UNGA for adoption.

OOSA Leadership

The Director of OOSA, formerly titled the Chief of Space Affairs, is appointed by the UN Secretary-General upon a competitive selection process, and under informal consultation with Member States. Prior to 2020, the OOSA Director reported to the Head of the UN Office at Vienna; since 2020, the Director reports directly to the UN Secretary-General reflecting the importance of space activities within the UN.

Table 1.7 | List of Directors of UNOOSA ²²

Period	Directors of UNOOSA
1960–1976	A. H. Abdel-Ghani (Egypt)
1976–1981	Lubos Perek (Czechoslovakia)
1982–1983	Marvin Robinson [Director ad interim] (USA)
1983–1988	Vladimír Kopal (Czechoslovakia)
1988–1999	Nandasiri Jasentuliyana (Sri Lanka)
1999–2002	Mazlan Othman (Malaysia)
2002–2007	Sergio Camacho-Lara (Mexico)
2007–2014	Mazlan Othman (Malaysia)
2014–2022	Simonetta Di Pippo (Italy)
2022–	Niklas Hedman (Acting Director) (Sweden)

Tasks and Responsibilities

UNOOSA is responsible for advancing international cooperation in space activity. While it does not have the power to make or enforce treaties, its ability to influence the peaceful exploration and use of outer space remains significant. Its mandate was established by a Secretary-General's Bulletin²³

²² The job titles of the heads of UNOOSA and its predecessor units have evolved over time, reflecting its growth in size and importance. From 1958 to 1968: Head of the Secretariat Space Expert Group; from 1968 to 1992: Chief of the Outer Space Division; since 1992: Director of the Office for Outer Space Affairs.

²³ United Nations Secretary-General's Bulletin: Organization of the Office for Outer Space Affairs, ST/SGB/2020/1.

and in relevant UNGA resolutions and decisions, including resolutions 1472 A (XIV) (1959), 76/3 (2021), 76/76 (2021) and 76/55 (2021).

Mirroring the mandate of the Committee, OOSA is responsible for all space matters at the UN, except for certain issues relating to militarization and security in outer space as well as subject to the special role of the International Telecommunication Union (ITU) with regard to the geostationary orbit (GEO) and radio frequency spectrum governance regimes.

UNOOSA's responsibilities have evolved far beyond its original core task of providing secretariat services to COPUOS and its subsidiary bodies. The Office of the Director discharges the obligations of the UN Secretary-General under international space law treaties. This includes especially the function to receive registration information on objects launched into outer space by Member States. UNOOSA then processes this information and makes it publicly available in an international registry of space objects on its website. UNOOSA, in collaboration with COPUOS and its Legal Subcommittee, has also provided practical guides and forms for the purpose of registration and other relevant documents.

Furthermore, UNOOSA also serves as the executive secretariat of the International Committee on Global Navigation Satellite Systems (ICG) and its Providers' Forum and as the secretariat of the Space Mission Planning Advisory Group (SMPAG). A member of OOSA also serves *ex officio* as a Vice-Chair of the COSPAR Panel on Planetary Protection in order to ensure that the panel is fulfilling its responsibilities under the UN Outer Space Treaty of 1967.²⁴

It also is tasked with the implementation of the UN Programme on Space Applications, which is led by the Space Application Section. The main task of the program is to provide capacity-building, education, research and development support and technical advisory services to emerging space-faring nations so as to narrow the gap between industrialized and developing nations in conducting space research and utilizing the benefits of space science and technology.

In 2006, UNOOSA established the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER). UN-SPIDER aims at improving developing nations' access to space applications and their products to better prepare for, prevent, warn of and respond to natural disasters. Besides its knowledge sharing platform and capacity building programs, it also aims to improve

²⁴ COSPAR, Panel on Planetary Protection (PPP), "1. Panel Membership", <https://cosparhq.cnes.fr/scientific-structure/panels/panel-on-planetary-protection-ppp/>

cooperation between providers of data and information relevant to disaster risk management and response. Critical for these purposes is especially data gained from and the use of systems for remote sensing for Earth observation, satellite-based telecommunication and global navigation satellite systems.

UNOOSA is also tasked with promoting understanding, acceptance, and implementation of the five United Nations treaties on international space law. Upon request, it also provides information and advice to Member States, international intergovernmental organizations, non-governmental organizations, and the general public on questions of space law. Specifically, the Committee, Policy and Legal Affairs Section assists States in implementing their obligations under international space law in their national space legislation through the Space Law for New Space Actors legal advisory project.

UNOOSA furthermore conducts several programs to support the inclusiveness of space research and education and equal access to the benefits of space applications, such as the Access to Space for All, Space4Youth, and Space4Women programs. There are also some programs designed to further the use of space applications for special causes, such as the Space4Water and Space4Health projects.

Secretariat to COPUOS

While the first group of experts that many years later was transformed into today's UNOOSA was established with the core function to provide secretariat services to COPUOS, it is by far no longer the only task of the Office. However, it continued to be one of its core tasks, and since taking over secretarial functions for the Legal Subcommittee as well in the early 1990s, UNOOSA is the only body acting as Secretariat of COPUOS and its subsidiary bodies. This function is discharged by the Committee, Policy and Legal Affairs Section (CPLA) of the Office, with the section chief mainly acting as Secretary of the Committee. While the Committee and its subsidiary bodies are not in session all year long, preparation for the sessions, including receiving and distributing information to members and holding intersessional consultations or Working Group meetings require continuous secretariat services by UNOOSA.

UNOOSA does not only provide substantive secretariat services and advises the Bureau of the Committee on procedural rules of the body. It also prepares the draft report and many other documents for the consideration by COPUOS and its subsidiary bodies. Furthermore, at the request of the Committee, the Secretariat also provides specialized

research on all areas of space applications and technology, space law, or any other matters within the Committee's mandate.

In essence, the CPLA section plans and prepares every session of the Committee and its subsidiary bodies, receives, synthesizes, and distributes information and ensures their effective practical working.

UN-Space and Other Relevant UN System Organizations for Space Affairs

UNOOSA also chairs and organizes the annual sessions of the UN Inter-Agency Meeting on Outer Space Activities (UN-Space), where several interested UN system entities participate to share information on the current or future use of outer space technology and applications to better fulfill their respective mandates and to foster cooperation among each other in that respect. As of 2023, 34 UN system organizations, offices or other institutions are participating in the annual UN-Space meetings. In addition to the UN internal sessions, UN-Space also holds informal thematic sessions, open to member States and other stakeholders from the private sector, non-governmental organizations, and academia.

UNISPACE Conferences

There have been three major global Conferences on the Exploration and Peaceful Uses of Outer Space (UNISPACE conferences), held in 1968, 1982, and 1999. In the General Assembly Resolution 1472, which created COPUOS, the UNGA also tasked the Committee and Secretariat with preparing the first of these conferences. The Committee and especially its Scientific and Technical Subcommittee have had long standing agenda items and Working Groups preparing the conferences and monitoring the implementation of its recommendations.

UNISPACE I was held in Vienna in 1968. UNISPACE I emphasized the equitable sharing of and access to the benefits to be gained from space applications. It recommended the establishment of the position of a UN Secretariat expert for space applications, which transformed into the UN Programme on Space Applications in 1971. The two following conferences recommended further strengthening the Programme on Space Applications.

UNISPACE II was held in Vienna as well in 1982. It was significantly larger than the first conference and for the first time included the representatives of private sector space companies. It also specifically recommended the establishment of six regional centers for space science and technology education, whose activities are coordinated by UNOOSA. These are:

- *Centre for Space Science and Technology Education in Asia and the Pacific* (CSSTEAP) (India, 1995)
- *African Regional Centre for Space Science and Technology Education - in French Language* (CRASTE-LF) (Morocco, 1998)
- *African Regional Centre for Space Science and Technology Education - in English Language* (ARCSSTE-E) (Nigeria, 1998)
- *Regional Centre for Space Science and Technology Education for Latin America and the Caribbean* (CRECTEALC) (Mexico & Brazil, 2003)
- *Regional Centre for Space Science and Technology Education for Western Asia* (RCSSTEWA) (Jordan, 2012)
- *Regional Centre for Space Science and Technology Education in Asia and the Pacific* (RCSSTEAP - China) (China, 2014)

UNISPACE III was held in Vienna in 1999. It has been the largest and most well attended of the UNISPACE conferences so far. The conference reiterated the importance and proposed the expansion of the Programme on Space Applications. Its outcome document, the *Vienna Declaration*, containing 33 concrete recommendations, put additional emphasis on the use of space applications and technology for the benefit of all nations, including especially developing States, and to protect both the outer space and Earth environment. The Vienna Declaration also created the idea to organize annual World Space Week events to promote international cooperation on space science and technology. Among its many other recommendations, the *Vienna Declaration* also urged the creation of an action team and later other mechanisms to study and address the dangers posed by near-Earth objects (NEOs) and international cooperation in responses to a possible impact.

The *Vienna Declaration* furthermore instigated the creation of the Space Generation Advisory Council (SGAC), in order to raise awareness about space activities among younger generations and to enhance visibility of their views on space affairs. SGAC is a permanent observer to COPUOS and regular participant in the Committee and Subcommittee sessions. It also partners with UNOOSA under its Space4Youth programme.

In June 2018, on the occasion of the 50th anniversary of the first UNISPACE conference, the Secretariat organized a dedicated high-level segment titled UNISPACE+50 that was held in conjunction with the 61st session of the COPUOS. The Space2030 Agenda was eventually adopted by the General Assembly in 2021.

The Space 2030 Agenda

The UNGA Res 76/3 also tasks UNOOSA with assisting States and the Committee in the implementation of the Space2030 Agenda, which,

broadly, is the space component to the overall UN strategic vision expressed in the Sustainable Development Goals 2030, the Sendai Framework for Disaster Risk Reduction 2015–2030, and the Paris Agreement on Climate Change. In order to conduct additional programs to implement the Space2030 Agenda, UNOOSA depends on voluntary contributions from member States or other entities.

UNOV Permanent Space Exhibit

The Vienna International Centre (VIC) is also home to a permanent space exhibit, found in the hallway between the D and E buildings, on the ground floor of the VIC. The VIC holds a lunar sample from the Apollo missions, a bust of Yuri Gagarin, a variety of small scale models of space rockets and space stations, and other interesting items related to the peaceful uses of outer space.



LUNAR SAMPLE 15459, 6
This lunar sample (moon rock) was collected by Astronaut James Irwin on the rim of Spur Crater during the Apollo 15 mission. This rock weighs 160 grams. It is a fragment of the original rock which weighed 5,854 grams when returned to Earth. The sample is a breccia. Lunar highland breccias are very old, about 3,900,000,000 years, older than 99.99% of all earth surface rocks. Scientific research is being conducted on the balance of this sample at NASA's Johnson Space Center and at other research centers in the United States and certain foreign nations under a continuing program of investigation involving lunar samples collected during the Apollo Program.

Figure 1.2 | Lunar Sample 15459, 6. Collected by astronaut James Irwin during Apollo 15, this sample weighs 160 grams and is perhaps 3.9 billion years old.

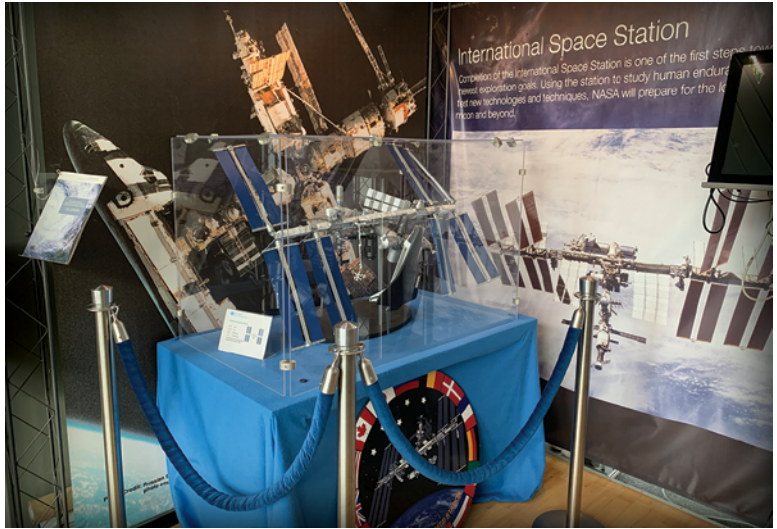


Figure 1.3 | Model of the International Space Station (ISS) on exhibit. This, along with other models in the exhibit, would be of interest to COPUOS delegates and other visitors to the VIC.



Figure 1.4 | Visitors can also pose with an astronaut cutout.



CHAPTER TWO

The Scientific and Technical Subcommittee



PERSONAL REFLECTIONS ON THE SCIENTIFIC AND TECHNICAL SUBCOMMITTEE

by Natália Archinard



Having represented Switzerland since 2007 at COPUOS and its Scientific and Technical Subcommittee (STSC), it was an honor for me and my country to be selected as the candidate of the Western European and Other States Group (WEOG) for the chairpersonship of STSC in 2020–2021. This was in 2018, exactly ten years after Switzerland had joined COPUOS. That year, COPUOS took note of the six candidates designated by the six regional groups for the six positions, and the General Assembly endorsed the composition of the Bureau for 2020–2021. The election itself formally occurred at the start of the 57th session in February 2020. Two years later, the last duty of my mandate was to open the 59th session and to proceed with the election of my successor, Juan Francisco Facetti of Paraguay, before handing over to him. My engagement came within Switzerland's commitment to build bridges to promote peace, security, and the rule of law as the foundations of prosperity and sustainability.

In consequence of the COVID-19 pandemic, many international meetings were canceled as of March 2020, including the 59th session of the Legal Subcommittee in April and the 63rd session of COPUOS in June 2020. After several informal consultations held in a virtual format in the intersession period, both on organizational matters and on the long-term sustainability of outer space activities, STSC resumed its works by holding its 58th session in April 2021 (two months later than in a normal COPUOS-calendar year). This session opened the door for the use of hybrid modalities within COPUOS and its Subcommittees. It was held mainly in a purely virtual format due to the sanitary restrictions in Vienna at the time. Whether some of these new modalities may further be applied is going to depend on the will of member States and on the resources of the Secretariat.

The UN Office for Outer Space Affairs (UNOOSA) has several important mandates and tasks, not the least being to serve the Committee and its two Subcommittees by organizing the meetings, preparing the documentation and advising member States on rules and procedures. During the COVID-19 pandemic, the role of the Secretariat proved to be crucial. Without the professionalism and commitment of its staff members, the continuation of the work of COPUOS under these

exceptional circumstances would not have been possible. Their support and dedication, while always to be counted upon, went beyond expectations during this period.

To my view, the Chair has a special role in guiding the work of the Subcommittee towards achieving its mandate and helping member States find consensus. By providing for clear and timely information, the Chair has the opportunity to enhance transparency and predictability in a way to ease the work of delegations. Being a subsidiary body to the United Nations General Assembly, COPUOS has inherited its rules and procedures. Over the years, COPUOS and its Subcommittees have adopted specific methods of work,²⁵ which they apply with flexibility. However, there is a golden rule: every decision needs to be taken by consensus. This means that all member States need to agree with the decision, and conversely every single member has the right to withhold its consensus—thereby blocking the proposed decision. This is also true for decisions concerning procedural matters.

Although COPUOS topics may seem technical, and partly are, they are also often very political. Using outer space and satellite technologies has become always more strategic for an increased number of States and private actors. Hence, geopolitics plays a role in space too. This is why space deserves diplomatic attention. This Briefing Book developed by the Secure World Foundation will surely become a reference for new, as well as experienced, delegates.

Natália Archinard

Chair, COPUOS Scientific and Technical Subcommittee (2020–2021)

²⁵ See for instance Compendium on rules of procedure and methods of work related to the United Nations Committee on the Peaceful Uses of Outer Space and its subsidiary bodies - Note by the Secretariat, A/AC.105/2016/CRP.5

The Scientific and Technical Subcommittee

2.1 INTRODUCTION

The Scientific and Technical Subcommittee (STSC) provides input to the Committee on the scientific and technical aspects of space activities, and on aspects of international cooperation related to these activities. Sessions of the STSC are scheduled for two full weeks early in the year (usually in February), so that discussions there might inform deliberations on legal and normative issues relating to space activities at the LSC, as well as discussions at the main COPUOS committee.

There is little apparent overlap between the agenda items considered by these Subcommittees. As a result, if the Committee acts on recommendations or reports by one of its Subcommittees, the matter has usually only been discussed in one of the Subcommittees. The agenda items and mandate to draft resolutions, recommendations or other documents on specific issues are usually assigned based on the degree to which they appear to be closer to the subject matter of one of the Subcommittees, or based on long-standing agenda items in one of them. An example for a long-standing agenda item is the Long-term Sustainability of outer space activities, which is also the topic of a Working Group (see chapter 4). In contrast, the more practical than legal Safety Framework for the Use of Nuclear Power Sources in Outer Space is an example for a drafting project that is closer to the subject-matter expertise of the STSC than the LSC.

Much of the deliberations of the STSC involve the sharing of scientific and technical information on space activities. However, where it is mandated to develop non-legally binding instruments, discussions at the STSC may become as political as in the LSC or the main Committee itself.

2.2 HISTORY

The permanent COPUOS Scientific and Technical Subcommittee met for the first time in 1962 as a permanent committee, and, with two exceptions, has met annually since its creation.

In 1999, an initiative to revive the Committee was led by Germany and a large group of other members. The proposal would bring significant changes to the method of work of the Committee. It added single issues/items under multi-year workplans to the Subcommittees' regular agenda items. Single-issue items would require annual renewal, and items under a multi-year workplan would have a predetermined expiration date.

However, since regular agenda items may only be removed from the agenda by consensus, members of the Committee were hesitant to add new agenda items. With the new types of agenda items, and another standing agenda item for the continuous discussion of the future methods of work of the Committee and its Subcommittees, the role of the Subcommittees and of ultimately COPUOS was revived.

Two further important drivers for the increased productivity of the STSC afterwards were the 1996 Space Benefits Declaration and, especially, the report and recommendations of the UNISPACE III conference in 1999. Together with the change in the methods of work, the STSC has significantly expanded its agenda. Additionally, due to the growth of the UN Programme on Space Applications, the creation of UN-SPIDER and the International Committee on Global Navigation Satellite Systems (ICG), along with other new programs of UNOOSA, the STSC also saw a rise in its responsibilities to monitor and support the implementation of these programs.

The STSC also took the lead in developing the LTS Guidelines, which were endorsed by COPUOS in 2019. These guidelines not only contain technical best practices, but also policy-oriented guidance relating to regulatory frameworks and international cooperation. This, and the fact that related issues have been discussed in the STSC previously, are likely the reason for having the STSC take the lead on the LTS negotiations. The resulting guidelines are voluntary in nature and grounded on the legal and cooperative basis of the UN Charter, international law, and COPUOS. They consist of an introduction and 21 guidelines. The debate on the issue of the long-term sustainability of outer space activities, including the implementation and possible amendment of the LTS Guidelines, continues in the STSC as an agenda item and in a new dedicated Working Group.

2.3 MANDATE AND METHODS OF WORK

The STSC's mandate is derived from the general mandate of COPUOS and specific tasks added by General Assembly resolutions (usually upon the proposal by COPUOS). The STSC is responsible for all scientific and technical aspects of the COPUOS mandate, and its discussions are expected to inform those of the Legal Subcommittee and of the main Committee. The STSC has also been instrumental in the deliberation on and planning of the UNISPACE conferences. Contrary to the Legal

Subcommittee, and except in limited instances of mostly technical best-practice guidelines, the production of draft documents for proposal by the main Committee to the UNGA has not been a main task of the STSC.

The STSC uses the same procedures and methods of work as the main Committee. Changes to them are subject to the approval of the main Committee and the UN General Assembly. Most draft texts proposed to the main Committee have first been developed in specialized Working Groups. These Working Groups are usually created with an agreed multi-year workplan and a determination of the scope and methods of work of the Working Group.

Negotiations on the creation of new agenda items and Working Groups usually reflect the lowest common denominator of member State opinions on an issue. Consequently, the most controversial issues thus often will not even get on the agenda of the STSC.

2.4 MAJOR DELIVERABLES

Most of the draft treaties, principles resolutions, and other non-legally binding documents recommended by COPUOS for consideration by the General Assembly were developed within the Legal Subcommittee. However, exceptions to this general rule include the Space Debris Mitigation Guidelines of COPUOS, concluded in 2007, the Safety Framework for Nuclear Power Source Applications in Outer Space in 2009, and the Guidelines on the Long-term Sustainability of Outer Space Activities (LTS Guidelines), finalized in 2019. The STSC was also instrumental in the planning for and preparation of the three UNISPACE conferences (1968, 1982, 1999) and the UNISPACE+50 High-level Segment (2018). The STSC was also tasked with monitoring and supporting the implementation of these conferences' recommendations.

2.5 STSC CHAIRS

The selection procedure for leadership of the STSC is similar to the rest of the COPUOS Bureau. Every two years, the Subcommittee deliberates and chooses the next Chair and Vice-Chairs of the STSC. These choices are then subjected to review and approval by the main Committee of COPUOS, and then by the UN General Assembly. The same rules as for the officers of the main Committee apply to the nomination of Chairs by alternate regional groups.

Table 2.1 | List of STSC Chairs

▼ YEAR	STSC Chair	▼ YEAR	STSC Chair
1959	D.C. Rose (Canada)	1983	J. H. Carver (Australia)
1960	not in existence / no chair	1984	J. H. Carver (Australia)
1961	not in existence / no chair	1985	J. H. Carver (Australia)
1962	D. F. Martyn (Australia)	1986	J. H. Carver (Australia)
1963	D. F. Martyn (Australia)	1987	J. H. Carver (Australia)
1964	D. F. Martyn (Australia)	1988	J. H. Carver (Australia)
1965	did not meet that year (no change)	1989	J. H. Carver (Australia)
1966	D. F. Martyn (Australia)	1990	J. H. Carver (Australia)
1967	D. F. Martyn (Australia)	1991	J. H. Carver (Australia)
1968	did not meet that year (no change)	1992	J. H. Carver (Australia)
1969	R.S. Rettie (Canada)	1993	J. H. Carver (Australia)
1970	J. H. Carver (Australia)	1994	J. H. Carver (Australia)
1971	J. H. Carver (Australia)	1995	J. H. Carver (Australia)
1972	J. H. Carver (Australia)	1996	Dietrich Rex (Germany)
1973	J. H. Carver (Australia)	1997	Dietrich Rex (Germany)
1974	J. H. Carver (Australia)	1998	Dietrich Rex (Germany)
1975	J. H. Carver (Australia)	1999	Dietrich Rex (Germany)
1976	J. H. Carver (Australia)	2000	Dietrich Rex (Germany)
1977	J. H. Carver (Australia)	2001	Karl Doetsch (Canada)
1978	J. H. Carver (Australia)	2002	Karl Doetsch (Canada)
1979	J. H. Carver (Australia)	2003	Karl Doetsch (Canada)
1980	J. H. Carver (Australia)	2004	Dumitru-Dorin Prunariu (Romania)
1981	J. H. Carver (Australia)	2005	Dumitru-Dorin Prunariu (Romania)
1982	J. H. Carver (Australia)	2006	B. N. Suresh (India)

2007	Mazlan Othman (Malaysia)	2016	V. K. Dadhwal (India)
2008	Aboubekr Seddik Kedjar (Algeria)	2017	Chiaki Mukai (Japan)
2009	Aboubekr Seddik Kedjar (Algeria)	2018	Pontsho Maruping (South Africa)
2010	Ulrich Huth (Germany)	2019	Pontsho Maruping (South Africa)
2011	Ulrich Huth (Germany)	2020	Natália Archinard (Switzerland)
2012	Félix Clementino Menicocci (Argentina)	2021	Natália Archinard (Switzerland)
2013	Félix Clementino Menicocci (Argentina)	2022	Juan Francisco Facetti (Paraguay)
2014	Elöd Both (Hungary)	2023	Juan Francisco Facetti (Paraguay)
2015	Elöd Both (Hungary)		

Following the switch to a rotational system for the whole Bureau, the STSC Chair has rotated to a different regional group every two years. As of 2023, out of the 102 members of the Committee, only 13 of them have ever held the STSC Chair. The longest-serving STSC Chair was Prof. J.H. Carver (Australia, 26 sessions). Australia is followed by Germany (seven); Canada (five); Romania, India, Algeria, Argentina, Hungary, South Africa, and Switzerland (two each); and Malaysia, Japan, and Paraguay (one each).

2.6 STSC AGENDA DEVELOPMENT

Admission of New STSC Agenda Items

Similar to the main Committee, the work of the Subcommittees is split up into agenda items, where delegations take the floor and address the Committee about specific issues related to the peaceful uses of outer space. New agenda items of the Subcommittees may be proposed by a Working Group, or during a meeting of the Subcommittee or the main Committee. The final decision for the acceptance of a new agenda item is taken by the UN General Assembly, which usually endorses the recommendations by the Committee on its proposed agenda.

Within COPUOS and its Subcommittees, the only way to add, or rather to recommend the addition of, a new agenda item is to achieve consensus. The UNGA also uses consensus or adoption without a vote as default procedure. However, if deemed necessary, the General Assembly may revert to majority voting on these issues. Theoretically, the General

Assembly could “overrule” the Committee’s decisions on agenda. However, this would be rather impractical and does not seem very likely.

Development of the STSC Agenda

The STSC agenda has gone through several historical iterations and developed into its current form only in the late 1990s and early 2000s. The Subcommittee’s early agenda contained a very small number of items. Contrary to the LSC agenda, the STSC has considered a broader set of issues and has considered several short-lived agenda items, tied to scientific/technological developments prevailing at that time. One specific type of agenda item is the theme fixed for special attention at the [...] session of the Scientific and Technical Subcommittee: [...]. While the “same” agenda item continued to remain on the agenda, the “themes” changed annually. Thus, this item was a first attempt at considering current hot topics in a flexible manner.

The implementation of the 1999 agenda reform (see section 1.7 – Development of the COPUOS Agenda) revitalized the work of the STSC and its agenda has developed accordingly and more topics have been added. Thus, the workload of the Subcommittee continues to increase and its agenda will require careful management.

Agenda items are discussed concurrently, usually three agenda items scheduled for deliberation during each meeting. With the exception of General Exchange of Views and Report to the Committee on the Peaceful Uses of Outer Space, all other substantive agenda items are usually opened for deliberations during three consecutive meetings of the Subcommittee.

In addition to its own agenda, every other year UNOOSA organizes a half-day symposium to strengthen the partnership with industry (the industry symposium). In years when the industry symposium is not held, the International Astronautical Federation (IAF) and the Committee on Space Research (COSPAR) alternate in organizing a symposium.

Discontinued STSC Agenda Items

The agenda of the LSC only slowly transitioned into its current form. Several agenda items also have been renamed several times, while mostly covering the same issues. These will be listed as one for the list below. In addition to the substantive items listed below, the STSC’s agenda also regularly featured items on the preparations for and implementation of the recommendations of the UNISPACE conferences as well as different types of procedural agenda items. Discontinued substantive agenda items include:

- Potentially Harmful Effects of Space Experiments (1963–1964)
- Definition of Outer Space (1967)
- Encouragement of International Programmes (1962–1969)
- Promotion of the Applications of Space Technology (1969)
- Space Technology and the Environment (1970, 1972)
- Education and Training (1963–1973)
- UN Registry of launchings of space objects (1970–1973)
- International Sounding Rocket Facilities (1962–1976)
- Matters relating to life sciences, including space medicine (1979–1998)
- Questions relating to space transportation systems and their implications for future activities in space (1979–1998)
- Progress in national and international space activities related to the Earth environment, in particular progress in the International Geosphere-Biosphere (Global Change) Programme (1987–1998)
- Matters relating to planetary exploration (1987–1998)
- Matters relating to astronomy (1987–1998)
- The theme fixed for special attention at the [...] session of the Scientific and Technical Subcommittee: [...] (1987–1998)
- Presentations on new launch systems and ventures (2000)
- International cooperation in human spaceflight (2000)
- Government and private activities to promote education in space science and engineering (2001)
- International cooperation in limiting obtrusive space advertising that could interfere with astronomical observations (2002)
- Means and mechanisms for strengthening inter-agency cooperation and increasing the use of space applications and services within and among entities of the United Nations system (2001–2003)
- Mobilization of financial resources to develop capacity in space science and technology applications (2002–2003)
- The use of space technology for the medical sciences and public health (2003)
- Implementation of an integrated, space-based global natural disaster management system (2001–2004)
- Solar-terrestrial Physics (2004)
- Space-system-based telemedicine (2003–2006)
- International Heliophysical Year 2007 (2005–2009)
- International Space Weather Initiative (2010–2012)

2.7 CURRENT STSC AGENDA ITEMS

1. Adoption of the Agenda

While at first not consistently listed as a separate agenda item, this simply denotes the formal adoption by the Subcommittee of its agenda for the ongoing session. This is done in accordance with the proposed agenda that had been included in the previous session's report, which was endorsed and approved by the main Committee and the General Assembly in its annual outer space resolution of the previous year.

2. Election of the Chair

STSC Chairs serve for two consecutive years. Since the full switch to a two-year rotational Bureau system in 2004 for the main Committee and the STSC, the election of the Chair agenda item only appears on the Subcommittee's agenda every other year. An exception to this schedule would be unscheduled vacancies or the "sharing"/splitting-up of a bureau rotation period in order to reach consensus on these decisions.

3. Statement by the Chair

This item has been on the Subcommittee's agenda since 1962. After the opening of the session and other procedural issues such as the adoption of the Agenda, the Chair delivers an extensive statement, carefully drafted with the support of the Secretariat. In it, the Chair welcomes the delegations, often mentions important substantive issues or practical information for the current session and, if appropriate, other space-related activities, especially those within the UN system. During the first meeting of the session considering this agenda item, the Director of UNOOSA also makes a statement on the work of the Office.

4. General Exchange of Views and Introduction of Reports Submitted on National Activities

This agenda item, on the Subcommittee's agenda with few exceptions since 1962, allows members and observers to report broadly on their space activities, submitted reports and any recent developments of relevance to the mandate of the Subcommittee. These statements also touch on other specific agenda items.

5. United Nations Programme on Space Applications

This item has been on the Subcommittee's agenda since 1970. Under this item, the Subcommittee considers the reports and presentations on international cooperation on space science and technology within the UN Programme on Space Applications and within regional cooperation mechanisms.

6. Space Technology for Sustainable Socioeconomic Development

This item has been on the Subcommittee's agenda since 2014. Under this item, the Subcommittee considers the various uses of space technology for sustainable socioeconomic development, especially relevant

programs by UNOOSA, such as the Space4Water and the Access to Space For All programs.

7. Matters Relating to Remote Sensing of the Earth by Satellite, including Applications for Developing Countries and Monitoring of the Earth's Environment

This item has been on the Subcommittee's agenda since 1970. Under this item, the Subcommittee considers how space-based remote sensing may be utilized for advancing the Sustainable Development Goals and combating the effects of climate change or other natural disasters.

8. Space Debris

This item has been on the Subcommittee's agenda since 1994. Under this item, the Subcommittee considers the challenges posed by the growing issue of space debris as well as various technological solutions and international cooperation initiatives to remedy this issue. Regularly, it furthermore assesses the relevance and implementation of relevant instruments developed by COPUOS, such as the Space Debris Mitigation Guidelines and the LTS Guidelines.

9. Space-System-Based Disaster Management Support

This item has been on the Subcommittee's agenda since 2005. Under this item, the Subcommittee generally considers the many ways in which space technology can support disaster management on Earth. A particular focus lies on the work of the UNOOSA-operated UN-SPIDER disaster relief program.

10. Recent Developments in Global Navigation Satellite Systems

This item has been on the Subcommittee's agenda since 2008. Under this item, the subcommittee considers recent developments in navigation satellite technology, national and regional navigation satellite systems and cooperations as well as the international cooperation within the International Committee on Global Navigation Satellite Systems (ICG). The latter is supported by UNOOSA as its Executive Secretariat.

11. Space Weather

This item has been on the Subcommittee's agenda since 2013. Under this item, the Subcommittee deliberates on the danger posed by space weather, caused by solar variability, owing to its potential threat to space systems, human space flight and the ground- and space-based infrastructure. It considers reports on recent research and UN and other international cooperation and education initiatives. Furthermore, it deliberates on the reports of the Expert Group on Space Weather, established under the STSC, whose work concluded in 2022.

12. Near-Earth Objects

This item has been on the Subcommittee's agenda since 2005. Under this item the Subcommittee considers the dangers posed by

Near-Earth Objects (NEOs) and discusses potential mechanisms to prevent or mitigate the effects of an impact. It considers the reports of national as well as regional space organizations on this issue as well as the work done in two international fora, the International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG).

13. Long-term Sustainability of Outer Space Activities

This item has been on the Subcommittee's agenda since 2010. Under this item, the Subcommittee considers the necessity and progress of national as well as international efforts to ensure the long-term sustainability of space activities. In particular, since the adoption of the LTS guidelines by COPUOS in 2019, the STSC monitors the implementation of the voluntary guidelines on a national level and deliberates on the reports of the Working Group on LTS, which has been established under the STSC.

14. Future Role and Method of Work of the Subcommittee

This item has been on the Subcommittee's agenda since 2020. Under this agenda item, the Subcommittee discusses the need for and nature of possible changes to its working methods, mandate and agenda. There are a plethora of statements made on several issues, such as whether the Committee/Subcommittee should remain a strictly intergovernmental body or for new issues to be discussed in the Subcommittee and all sorts of procedural reform proposals as to agenda items, working methods and Working Groups in the STSC. The STSC also discusses possible cooperation, symposia and other events, with governmental or non-governmental actors, such as the IAF and others.

15. Use of Nuclear Power Sources in Outer Space

This item has been on the Subcommittee's agenda since 1979. Under this item, the Subcommittee considers ongoing issues relating to the use of nuclear power sources in outer space. This includes the implementation of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space and of the Safety Framework for Nuclear Power Source Applications in Outer Space, which was developed jointly by the Subcommittee and IAEA. Furthermore, under this item, the STSC considers the reports of the Working Group on the Use of Nuclear Power Sources in Outer Space, which has been established under the STSC.

16. Space and Global Health

This item has been on the Subcommittee's agenda since 2019. Under this item, the Subcommittee considers the full breadth of space activities related to global health, such as telemedicine, space life sciences, space technologies, tele-epidemiology, and disaster management (including responding to epidemics), as well as activities undertaken through space-based research, including at the International Space Station. The STSC also considers the reports of the Working Group on Space and Global Health.

17. Examination of the Physical Nature and Technical Attributes of the Geostationary Orbit and its Utilization and Applications, including in the Field of Space Communications, as well as Other Questions Relating to Developments in Space Communications, taking Particular Account of the Needs and Interests of Developing Countries, without Prejudice to the Role of the International Telecommunication Union

This item has been on the Subcommittee's agenda since 1978. Under this item, the Subcommittee deliberates on the nature, technical attributes and utilization of the Geostationary Orbit (GEO) as well as developments in space-based communication applications. The STSC annually invites the observer for the International Telecommunication Union (ITU) to present a report on the ITU's relevant work in this field, especially as it pertains to frequency management and the distribution of orbital slots on the GEO. A continuing theme is to ensure access to space for all and an equitable distribution of GEO slots, in particular in light of the tempered first-come-first-served approach applied by the ITU. A further issue discussed with respect to space-based communications in general, are the technical and regulatory challenges posed by very large satellite constellations.

18. General Exchange of Views on Dark and Quiet Skies for Science and Society

This item has been on the Subcommittee's agenda since 2022. Under this item, the Subcommittee considers the interference by spacecraft transmissions or reflected sunlight into astronomical telescopes as they cross their field of view, thereby degrading astronomical observations. The STSC discusses various technical means and practical cooperation to find an appropriate balance, considering the needs of both the Earth-based optical and radio astronomy community, as well as orbital satellite operators.

19. Draft Provisional Agenda for the [...] Session of the Scientific and Technical Subcommittee

Under this agenda item, the STSC deliberates on the addition of new agenda items and the retention of existing items. It then provides a provisional agenda for its next session for consideration by the main Committee and the General Assembly.

20. Report to the Committee on the Peaceful Uses of Outer Space

This item has been on the Subcommittee's agenda since its first session. It is usually scheduled for two full days. While the respective parts of the report on this agenda item usually are very brief, these deliberations take a lot of time, as consensus is usually established going through the draft report paragraph by paragraph.

CHAPTER THREE

The Legal Subcommittee



PERSONAL REFLECTIONS ON THE LEGAL SUBCOMMITTEE

by Setsuko Aoki



I had the honor of being elected Chair of the COPUOS Legal Subcommittee for its 59th session and 60th sessions (2020 and 2021). I was chosen as Chair from the Asia-Pacific States, and happen to be the first female Chair and the first Japanese Chair of the Legal Subcommittee. The Chair of COPUOS and its two Subcommittees are selected on a rotating basis from the five UN regions (Africa, Asia-Pacific, Eastern Europe, Latin America and the Caribbean, and Western Europe and Other States).

Due to the global COVID-19 pandemic, my tenure as Chair of the Legal Subcommittee was an unprecedented one. The 59th session, in 2020, had to be canceled, the first time in the history of COPUOS. The 60th session, in 2021, was held in hybrid format and only a few delegations were in attendance in the conference room—and only then under strict social distancing restrictions imposed on the entire United Nations Office at Vienna (UNOV).

This hybrid format brought about challenges, such as the coordination of time differences of States members and the establishment of a special virtual format requiring the simultaneous interpretation of the six official UN languages. To best coordinate the effective participation from the various time zones around the world, the usual three hours per session (10:00–13:00 for the morning session; and 15:00–18:00 for the afternoon session) were reduced to two hours per session (11:00–13:00 for the morning session; and 15:00–17:00 for the afternoon session). This reduction by two hours per day for the scheduled work of the Committee only increased the challenges for the Committee to discuss various important agenda items.

However, these time restrictions served to bond States members together to reach consensus and fulfill the Legal Subcommittee's mandate. This spirit of international cooperation, the "Vienna Spirit," resulted in one of the smoothest adoptions of the report of the Legal Subcommittee and of its Working Groups in the 21st century, and the 2021 session of the Legal Subcommittee ended in the morning session of its tenth and final day.

During our session, particular attention was paid to the agenda item General Exchange of Views on Potential Legal Models for Activities in the Exploration, Exploitation and Utilization of Space Resources—partly because the discussion revolved around whether a Working Group should

be established on this topic. After eight rounds of scheduled informal consultations, all held during plenary meetings of the Committee (and therefore with interpretation services available), the establishment of a Working Group was decided upon. Under the most amicable atmosphere, the Moderator (Andrzej Misztal of Poland) and the Vice-Moderator (Steven Freeland of Australia) of the scheduled informal consultations were appointed as Chair and Vice-Chair of the Working Group. This was a great example of the Subcommittee working in a flexible method and based on the consensus of States members.

The discussion and deliberation of some topics require more time than others. Therefore, intersessional discussions amongst States members, and specially scheduled informal discussions taking place during the main Committee and/or the Subcommittees, have been occasionally required.

The art of hosting a diplomatic conference includes deciding how much time to allocate to a topic, and deciding where in the schedule to allocate that time. This art highlights the skill of the highly expert staff of the United Nations Office for Outer Space Affairs (UNOOSA), which acts as the Secretariat to COPUOS. It is the shared duty of the Chair and the Secretariat to cooperate in realizing the will of delegations. This is done through a good working relationship between them, and with the States members of the Committee. As a Chair, I was most lucky that a strong team at UNOOSA supported me all through these extraordinary sessions.

Finally, I would like to draw your attention to the steadily increasing number of States members of COPUOS. Since its beginning with 24 members in 1959, COPUOS reached 100 States members in 2021. We will see further increases in the future. This growth is an encouraging sign for the further development of international space law, and its role in fostering the exploration and use of outer space for all humanity. However, a new State member may find it difficult to effectively engage in the discussions of the various agenda items (some of which have existed for decades), or to have a reasonable knowledge of the mandates of the working groups or the procedures for adopting reports. It would be most useful for any new delegate to ask about points of ambiguity to the UNOOSA staff. They are professionals, full of experience and knowledge, and are there to help States members perform their mission to the fullest. Paying special attention to the annual IISL/ECSL symposium (held in the afternoon of the first day of the Legal Subcommittee) may also be effective in grasping the current situation of international space law and to where it would develop.

Setsuko Aoki

Chair, COPUOS Legal Subcommittee (2020–2021)

The Legal Subcommittee

3.1 OVERVIEW

The Legal Subcommittee is responsible for the legal and regulatory aspects of the Committee's mandate. Ideally, its recommendations to the Committee should themselves be informed by the deliberations of the annual sessions of the STSC, usually scheduled before the Legal Subcommittee sessions. The LSC has been the forum for the development, drafting, and negotiation of all five UN treaties of outer space. While this function is theoretically still intact, since 1979 the LSC has not significantly focused on developing new legally binding instruments. Nevertheless, it is still the main forum for the discussion of legal issues relating to outer space activities (except for certain issues related to space security and disarmament).

3.2 HISTORY

The COPUOS *ad hoc* Committee had two temporary Subcommittees of the whole, one legal and one technical, which met in 1959. The permanent COPUOS LSC, like the STSC, met for the first time in 1962 and has met annually since its creation.

The LSC's first two decades of existence mark also the first peak of its productivity. It was the origin of all five UN treaties on space law, and all principles resolutions adopted by the UNGA. Due to differences in views between States members and the fear of being bogged down by gridlocked discussions, by the 1990s there was extreme hesitance to add new items to the Subcommittees' agendas. For these and other outside reasons, the Subcommittees, like the COPUOS as a whole, reached the lowest mark of their productivity.

In 1999, an initiative by a large group of members of the Committee, led by Germany, proposed a significant change to the methods of work of the Committee. The proposal, which was later accepted, added single issues/ items, which have to be renewed annually and items under multi-year workplans, with a predetermined expiration date, to the Subcommittees' regular agenda items. Since regular agenda items may only be removed from the agenda by consensus, members of the Committee were hesitant to add new agenda items. With the new types of agenda items and another standing agenda item for the continuous discussion of the future methods of work of the Committee and its Subcommittees, the role of the Subcommittees and ultimately COPUOS was revived. As evidence of this, the Legal Subcommittee added several new agenda items and drafted a number of non-legally binding documents over the following two decades.

3.3 MANDATE AND METHODS OF WORK

The Legal Subcommittee's mandate is derived from the general mandate of COPUOS and specific tasks added by UNGA resolutions (usually upon proposal by COPUOS). Thus, the Legal Subcommittee is responsible for studying all legal issues relevant to the COPUOS mandate. In turn, discussions at the LSC are intended to inform discussions at the main Committee. The Legal Subcommittee has also occasionally been tasked with drafting and developing draft treaties and non-legally binding instruments, including deliverables such as the major UN treaties on outer space, as well as various non-binding resolutions and principles statements.

For the most part, both the Legal and the Scientific and Technical Subcommittees use the same procedures and methods of work as the main Committee of COPUOS. Any changes to these procedures and methods would be subject to the approval of the main Committee and of the UN General Assembly.

Most draft texts proposed to the main Committee have first been developed in specialized Working Groups. These Working Groups are usually created with a multi-year workplan, and the determination of the methods of work of the Working Group are generally the same for both Subcommittees.

Since the reforms of 1999 (as detailed in Section 1.7 – Agenda Development) the addition of a new item on the Subcommittee's agenda, establishment of a dedicated Working Group and terms of reference for the latter are often discussed jointly. The LSC thus jointly negotiates the scope of the multi-year workplan under an agenda item and the terms of reference/mandates of the concomitant Working Groups. Already at this stage, these documents often reflect the maximum degree of possible compromise on an issue or proposed solutions to be considered. Thus, the most controversial issues will not often get on the agenda of the Subcommittees.

A Working Group's mandate, scope, and terms of reference are thus discussed and negotiated within the discussions at the LSC under the Agenda Item on the same topic.

3.4 MAJOR DELIVERABLES

The Legal Subcommittee's main deliverables are described previously (in Chapter 1, section 9), as they also constitute the main deliverables of COPUOS as a whole. These include the treaties, resolutions, and other non-legally binding documents mentioned in the first chapter. Additionally, the Working Group on the status and application of the five UN treaties

on outer space has collected and synthesized valuable information on national space legislation and other views of members of the Committee on issues of space law. These responses to the questionnaires drafted by the chair of the Working Group, provide a valuable basis for further discussion of the substantive legal issues and may support other States in the domestic implementation of their obligations under international space law.

3.5 LSC CHAIRS

Chairs of the Legal Subcommittee serve for two years. The selection procedure for Chairs of the Legal Subcommittee is similar to the rest of the COPUOS Bureau. Every two years, the Subcommittee deliberates and chooses the next Chairs of the Legal Subcommittee. These choices are then subjected to review and approval by the main Committee of COPUOS, and then by the UN General Assembly. The same rules as for the officers of the main Committee apply to the nomination of Chairs by the various regional groups.

Table 3.1 | List of LSC Chairs

▼ YEAR	STSC Chair	▼ YEAR	STSC Chair
1959	Antonio Ambrosini (Italy)	1972	Eugeniusz Wyzner (Poland)
1960	not in existence / no chair	1973	Eugeniusz Wyzner (Poland)
1961	not in existence / no chair	1974	Eugeniusz Wyzner (Poland)
1962	Manfred Lachs (Poland)	1975	Eugeniusz Wyzner (Poland)
1963	Manfred Lachs (Poland)	1976	Eugeniusz Wyzner (Poland)
1964	Manfred Lachs (Poland)	1977	Eugeniusz Wyzner (Poland)
1965	Manfred Lachs (Poland)	1978	Eugeniusz Wyzner (Poland)
1966	Manfred Lachs (Poland)	1979	Eugeniusz Wyzner (Poland)
1967	Eugeniusz Wyzner (Poland)	1980	Eugeniusz Wyzner (Poland)
1968	Eugeniusz Wyzner (Poland)	1981	Eugeniusz Wyzner (Poland)
1969	Eugeniusz Wyzner (Poland)	1982	Eugeniusz Wyzner (Poland)
1970	Eugeniusz Wyzner (Poland)	1983	Ludek Handl (Czechoslovakia)
1971	Eugeniusz Wyzner (Poland)	1984	Ludek Handl (Czechoslovakia)

1985	Ludek Handl (Czechoslovakia)	2005	Sergio Marchisio (Italy)
1986	Ludek Handl (Czechoslovakia)	2006	Raimundo González Aninat (Chile)
1987	Ludek Handl (Czechoslovakia)	2007	Raimundo González Aninat (Chile)
1988	Ludek Handl (Czechoslovakia)	2008	Vladimír Kopal (Czech Republic)
1989	Stanislav Suja (Czechoslovakia)	2009	Vladimír Kopal (Czech Republic)
1990	Václav Mikulka (Czechoslovakia)	2010	Ahmad Talebzadeh (Islamic Republic of Iran)
1991	Václav Mikulka (Czechoslovakia)	2011	Ahmad Talebzadeh (Islamic Republic of Iran)
1992	Václav Mikulka (Czechoslovakia)	2012	Tare Charles Brisibe (Nigeria)
1993	Václav Mikulka (Czech Republic)	2013	Tare Charles Brisibe (Nigeria)
1994	Václav Mikulka (Czech Republic)	2014	Kai-Uwe Schrogl (Germany)
1995	Václav Mikulka (Czech Republic)	2015	Kai-Uwe Schrogl (Germany)
1996	Václav Mikulka (Czech Republic)	2016	Hellmut Lagos Koller (Chile)
1997	Václav Mikulka (Czech Republic)	2017	Laura Jamschon Mac Garry (Argentina)/Hellmut Lagos Koller (Chile)
1998	Václav Mikulka (Czech Republic)	2018	Andrzej Misztal (Poland)
1999	Vladimír Kopal (Czech Republic)	2019	Andrzej Misztal (Poland)
2000	Vladimír Kopal (Czech Republic)	2020 ²⁶	Setsuko Aoki (Japan)
2001	Vladimír Kopal (Czech Republic)	2021	Setsuko Aoki (Japan)
2002	Vladimír Kopal (Czech Republic)	2022	Nomfuneko Majaja (South Africa)
2003	Sergio Marchisio (Italy)	2023	Nomfuneko Majaja (South Africa)
2004	Sergio Marchisio (Italy)		

Due to considerations of equal representation of western and Soviet bloc States, the fixed-chair system is the reason why the table for the most sessions as LSC Chair since 1963 is jointly led by Poland (23), followed by the Czech Republic (formerly Czechoslovakia) (22). As of 2023, they are followed by Chile and Italy (four each); the Islamic Republic of Iran, Nigeria, Germany, and Japan (two each); and Argentina

²⁶ No session was held. Decisions taken by the Subcommittee by written procedure due to the COVID-19 pandemic.

and South Africa (one each). As of 2023, only 10 out of 102 States members of COPUOS have ever held the Chair of the Legal Subcommittee.

The Legal Subcommittee has not experienced as extensive continuity in the person of the LSC Chair as the STSC. However, it is particularly noticeable that four out of the five UN Space Treaties were negotiated and finalized during the tenure of Eugeniusz Wyzner (Poland). Another memorable figure among the Chairs of the Legal Subcommittee is Manfred Lachs (Poland, 1962–1966), who served as the first Chair and under whose leadership the Legal Subcommittee negotiated and drafted both the Legal Principles Declaration (1963) and the Outer Space Treaty (1967). Upon being appointed as a judge of the International Court of Justice, he resigned as Chair of the LSC after the 1966 session, and served at the ICJ from 1966 until his death in 1993.

3.6 LSC AGENDA DEVELOPMENT

Admission of New LSC Agenda Items

Similar to the main Committee, the work of the Subcommittees is split up into agenda items, where delegations take the floor and address the Committee about specific issues related to the peaceful uses of outer space. New agenda items of the Subcommittees may be proposed by a Working Group, or during a meeting of the Subcommittee or the main Committee. The final decision for the acceptance of a new agenda item is taken by the UN General Assembly, which usually endorses the recommendations by the Committee on its proposed agenda.

Within COPUOS and its Subcommittees, the only way to add, or rather to recommend the addition of, a new agenda item is to achieve consensus. The UNGA also uses consensus or adoption without a vote as default procedure. However, if deemed necessary, the General Assembly may revert to majority voting on these issues. Theoretically, the General Assembly could “overrule” the Committee’s decisions on agenda. However, this would be rather impractical and does not seem very likely.

Development of the LSC Agenda

The LSC agenda has gone through several historical iterations and developed into its current form only in the late 1990s and early 2000s. The Subcommittee’s early agenda contained a very small number of items. Except for very limited *Other Matters*, and the early addition of the question of the definition and delimitation of outer space, the LSC agenda consisted mostly of items for which there had been a specific task mandated by the UN General Assembly. These items, such as Draft Convention on Liability for Damage Caused by Objects Launched into

Outer Space, also generally each had a dedicated Working Group. These issues appear to have been seen as clear tasks to develop a specific concrete document (draft treaty, UNGA resolution or other), upon the conclusion of which the item would be removed from the Subcommittee's agenda and the Committee would then turn to the next issue. Until the 1990s, the Committee usually considered around three such substantive items per session.

In the early 1990s, the LSC started to include long-term items designed to monitor the implementation of certain documents or discuss other legal issues, without a clear workplan. The changes to the agenda and working methods of COPUOS and its Subcommittees in the late 1990s (see section 1.7 – Development of the COPUOS Agenda) refocused on creating multi-year workplans and dedicated Working Groups. However, many agenda items added since then still exist on the Committee's agenda without the creation of outcome documents such as draft treaties, principles, or resolutions currently envisaged. As of 2023, the LSC agenda appears as a forum for general long-term debates on a very broad set of legal issues, and without the requirement that these agenda items lead to new treaties, resolutions, or other documents.

Agenda items are discussed concurrently, with usually three agenda items scheduled for deliberation during each meeting. With the exception of General Exchange of Views and Report to the Committee on the Peaceful Uses of Outer Space, all other substantive agenda items are usually opened for deliberations during three consecutive meetings of the Subcommittee.

In addition to its own agenda, the LSC annually invites the International Institute of Space Law and the European Centre for Space Law to hold a joint symposium on current issues of international space law on the afternoon of the first day of a session.

Discontinued LSC Agenda Items

The agenda of the LSC has slowly transitioned into its current form. Several agenda items have been renamed several times, while mostly covering the same issues. Discontinued substantive agenda items include:

- Other legal problems suggested for future study (1962)
- International agreement on the legal principles governing activities of States in outer space (1962–1966)
- Draft agreement on assistance to and return of astronauts and space vehicles (1964–1967)
- The utilization of outer space and celestial bodies, including the various implications of space communications (1967–1971)

- Draft convention on liability for damage caused by objects launched into outer space (1965–1971)
- Draft convention on registration of objects launched into outer space for the exploration or use of outer space (1972–1974)
- Draft Treaty Relating to the Moon (1972–1979)
- Elaboration of draft principles governing the use by States of artificial Earth satellites for direct television broadcasting (1972–1981)
- Legal implications of remote sensing of the Earth from space (1972–1986)
- The elaboration of draft principles relevant to the use of nuclear power sources in outer space (1980–1992)
- Consideration of the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries (1988–1996)
- Review of the status of the five international legal instruments governing outer space (1998–2000)
- Review of the concept of the “launching State” (2000–2002)
- Contributions by the Legal Subcommittee to the Committee on the Peaceful Uses of Outer Space for the preparation of its report to the General Assembly for its review of the progress made in the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) (2004)
- Practice of States and international organizations in registering space objects (2004–2007)
- General exchange of information on national mechanisms relating to Space Debris Mitigation (2009–2012)
- Consideration of the draft convention of the International Institute for the Unification of Private Law (UNIDROIT) on international interests in mobile equipment and the preliminary draft protocol thereto on matters specific to space property (2001–2013)
- Review of international mechanisms for cooperation in the peaceful exploration and use of outer space (2013–2016)
- Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1993–2019)

3.7 CURRENT AGENDA ITEMS

1. Adoption of the Agenda

While previously not consistently listed as a separate agenda item, this simply denotes the formal adoption by the Subcommittee of its agenda for the ongoing session. This is done in accordance with the proposed agenda that had been included in the previous session’s report, which would have

been endorsed and approved by the main Committee and the General Assembly in its annual outer space resolution of the previous year.

2. Election of the Chair

Since the switch to a two-year rotational Bureau system in 2006 for the LSC, this agenda item only appears on the Subcommittee's agenda every other year. An exception to this schedule would be unscheduled vacancies or the "sharing"/splitting-up of a bureau rotation period in order to reach consensus on these decisions.

3. Statement by the Chair

This item has been on the Subcommittee's agenda since 1962. At some point after the opening of the session and some procedural issues, the Chair delivers an extensive statement, carefully drafted with the support of the Secretariat. In it the Chair welcomes the delegations, often mentions important substantive issues or practical information for the current session and, if appropriate, other space-related activities, especially within the UN system.

4. General Exchange of Views

This agenda item, on the Subcommittee's agenda with few exceptions since 1963, allows members and observers to broadly report on their activities and any recent developments of relevance to the mandate of the Subcommittee. Several statements also touch on other specific agenda items. During the first meeting of the session considering this agenda item, the Director of UNOOSA also makes a statement on the work of the Office.

5. Information on the Activities of International Intergovernmental and Non-governmental Organizations Relating to Space Law

This item has been on the LSC's agenda since 2000. Under this item, statements are made on the activities of international intergovernmental and non-governmental organizations relating to space law. Most of the speakers under this agenda item are usually observers of COPUOS presenting their space law-related work of the preceding year.

6. Status and Application of the Five United Nations Treaties on Outer Space

This item has been a regular item on the LSC's agenda since 2000. This agenda item usually considers both the current status of ratifications of the five UN Treaties on Outer Space and their application. For the most part, the LSC considers the reports of the Working Group under this agenda item and other documents produced by the Working Group or its chair. Examples for this are a draft guidance on the status of international space law and questionnaires, asking the members and observers of COPUOS for their views on issues such as the customary law status of the five UN Treaties on Outer Space or how they apply to small satellites.

7. Matters Relating to: (a) The Definition and Delimitation of Outer Space; (b) The Character and Utilization of the Geostationary Orbit, Including Consideration of Ways and Means to Ensure the Rational and Equitable Use of the Geostationary Orbit Without Prejudice to the Role of the International Telecommunication Union

This item has been on the LSC's agenda since 1967. It is one of the oldest substantive regular items on the Subcommittee's agenda. The topic was first debated at the UN in the 1959 *ad hoc* Committee sessions, the report of which already classified it as an issue that is not suited for priority treatment. Based on a recommendation by the LSC at its 39th session in 2000, the General Assembly decided to split this agenda item in two parts, (a) and (b). While both issues were to remain on the LSC agenda, they were to be discussed separately and the Working Group convened under this agenda item was to focus only on part (a), the definition and delimitation of outer space. This Working Group has existed since 1983 and continues to be reconvened (although only every other year since 2021). Despite all these discussions, there has been no international consensus reached on where airspace ends and outer space begins.²⁷

8. National Legislation Relevant to the Peaceful Exploration and Use of Outer Space

This item has been on the LSC's agenda since 2008. Under this agenda item, members share their recent practice and activities relating to creating or reforming their national space legislation. It is often emphasized how crucial national legislation is to ensure compliance by a State with its international legal obligations. There has previously been a Working Group under this agenda item, which in 2013 produced a set of six recommendations for States on what to consider when drafting national space legislation.²⁸

9. Capacity-Building in Space Law

This item has been on the LSC's agenda since 2008. This agenda item broadly covers the exchange of information on all international, regional, and national capacity-building measures in space law. Of particular interest are the activities of UNOOSA in this respect. The Subcommittee usually has before it reports and presentations on the annual space law conferences co-hosted by UNOOSA, the Space Law for New Space Actors Legal Advisory Project and the directory of educational opportunities

²⁷ Some States have chosen the so-called Kármán line at 100 km above sea level for this delimitation in their national legislation on the basis that below this line aerodynamics governs flight, whereas above it, orbital dynamics governs flight. However, there is no consensus on the air-space delimitation at international level.

²⁸ Committee on the Peaceful Uses of Outer Space, Report of the Working Group on National Legislation Relevant to the Peaceful Exploration and Use of Outer Space on the work conducted under its multi-year workplan, <https://undocs.org/A/AC.105/C.2/101>; see also UNGA Res. 68/74, Recommendations on national legislation relevant to the peaceful exploration and use of outer space, 11 Dec. 2013, <https://undocs.org/A/RES/68/74>

in space law document, maintained and updated by UNOOSA. More information on the space law capacity-building activities of UNOOSA are available on its website, unoosa.org.

10. Future Role and Method of Work of the Committee

This item has been on the LSC's agenda since 2021. Under this agenda item, the Subcommittee discusses the need for and nature of possible changes to its working methods, mandate, and agenda. There are a plethora of statements made on several issues, such as whether the Committee/Subcommittee should remain a strictly intergovernmental body, whether there is a need for new treaties or for new issues to be discussed in the Subcommittee and all sorts of procedural reform proposals regarding the introduction of agenda items, working methods, and Working Groups in the LSC.

11. General Exchange of Information and Views on Legal Mechanisms Relating to Space Debris Mitigation and Remediation Measures, Taking into Account the Work of the Scientific and Technical Subcommittee

This item has been on the LSC's agenda since 2013. Under this agenda item, the LSC broadly discusses the issue of space debris mitigation and remediation under existing treaties and the application of non-legally binding instruments and guidelines, such as the COPUOS debris guidelines, the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines, and the Long-term Sustainability Guidelines. Potential legal issues, as well as solutions for the issue of space debris are highlighted during the statements.

12. General Exchange of Information on Non-Legally Binding United Nations Instruments on Outer Space

This item has been on the LSC's agenda since 2014. Under this item, the LSC considers the importance and the degree of States' voluntary implementation of the various non-legally binding UN instruments on outer space, such as the LTS or the Space Debris Mitigation Guidelines. Statements usually are made on national practices to abide by the instruments as well as the implementation of the instruments by incorporation in national space legislation.

13. General Exchange of Views on the Legal Aspects of Space Traffic Management

This item has been on the LSC's agenda since 2016. This agenda item provides member States with a forum to discuss the legal issues concerning space traffic management (STM). Statements under this item usually emphasize the pressing need for transparency, coordination, and information sharing measures to be taken. Statements also often emphasize the importance of the UN Treaties on Outer Space, non-legally binding instruments such as the LTS Guidelines and enhancing the registration of space objects as important foundational steps towards space traffic management.

14. General Exchange of Views on the Application of International Law to Small-Satellite Activities

This item has been on the LSC's agenda since 2016. It allows for the consideration by the LSC of various topical issues relating to international and national policy and regulatory measures regarding the use of small satellites by various actors. While emphasizing the educational and commercial benefits of some small satellite programs, their lack of independent propulsion and their use in very large satellite constellations are issues debated under this agenda item. There may be some overlap with the work of the LSC under the agenda item on The Status and Implementation of the Five UN Treaties on Outer Space and its Working Group as it relates to the treaties' application to small satellite activities.

15. General Exchange of Views on Potential Legal Models for Activities in the Exploration, Exploitation and Utilization of Space Resources

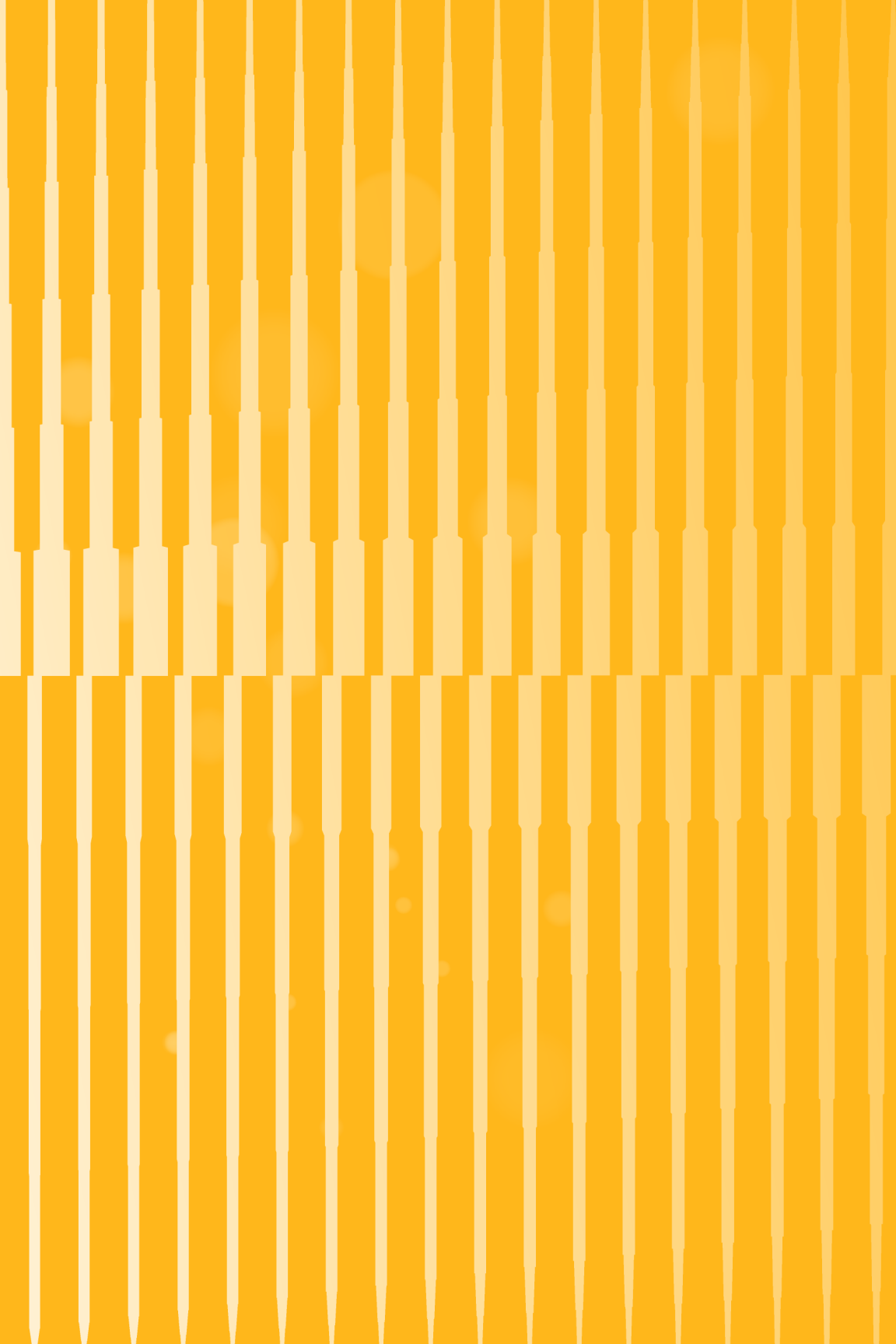
This item has been on the LSC's agenda since 2017. The addition of this agenda item and the terms of reference of the Working Group on Legal Aspects of Space Resource Activities that have been established upon a multi-year initiative of several member States of COPUOS. Under this agenda item, the controversial topic of the applicable current and potentially necessary future legal framework to activities in the exploration, exploitation, and utilization of space resources is considered. Common legal issues are the compatibility of unilateral resource extraction, including by non-governmental entities, with the Outer Space Treaty's non-appropriation principle; the role, if any, that the Moon Agreement plays in these situations, and how other treaty or non-legally binding rules may apply to the challenges posed by operationalized space resource extraction.

16. Proposals to the Committee on the Peaceful Uses of Outer Space for New Items to be Considered by the Legal Subcommittee at its [...] Session

This item has been on the LSC's agenda since 2000. Under this agenda item, the LSC deliberates on the addition of new agenda items and the retention of existing agenda items. It also provides a provisional agenda for its next session for the consideration by the main Committee and the General Assembly. This list of provisional agenda items is split into the groups of regular items, items under workplans, single-issue items, and new items.

17. Report to the Committee on the Peaceful Uses of Outer Space

This item has been on the Subcommittee's agenda since its first session. It is usually scheduled for two full days. While the respective parts of the report on this agenda item usually are very brief, these deliberations take a lot of time, as consensus is usually established by reviewing and adopting the report paragraph by paragraph, and then finally adopting the report (as amended) as a whole.



CHAPTER FOUR

Working Groups at COPUOS



PERSONAL REFLECTIONS ON WORKING GROUPS AT COPUOS

by Peter Martinez



Given the number of member States and the breadth of the agenda in COPUOS and its subcommittees, the normal sessions leave little time for in-depth discussion of any agenda item over and above the formal exchanges of prepared statements by States. Moreover, many of the delegates are generalist diplomats, and not specialists in a given subject area. When it becomes clear that an in-depth discussion among experts is required, a Working Group is created to deliberate the issue and report back to the main Committee or relevant subcommittee of COPUOS.

Working Groups are the principal mechanism that the Committee uses to allow in-depth discussion and debate among technical experts on a given issue or set of issues. From 2010 to 2018, I had the privilege and honor to Chair the Scientific and Technical Subcommittee's Working Group on the Long-term Sustainability of Outer Space Activities (or "Working Group on LTS" as it came to be known). The Working Group was established under an agenda item of the same name by the Scientific and Technical Subcommittee in 2010 following several years of deliberations on different aspects of what we now loosely broadly refer to as "space sustainability." At that time, there were growing concerns about the unchecked proliferation of space debris, and the Cosmos-Iridium collision was still fresh in delegates' minds. There was a growing sense among delegations that COPUOS had to do something to address these concerns, but this was not something that was shared by all delegations, and it took time to socialize the issue among the member States.

The first issue to be addressed was reaching agreement on the terms of reference, scope, and methods of work. These deliberations were concluded at the 54th session of COPUOS in June 2011. Initially, the Working Group could not agree on a textbook definition of the long-term sustainability of outer space activities, but it could agree on a list of issues that delegations identified as being pertinent to the discussion of the topic. These topics fell into four broad categories: space and sustainable development, space safety and collaborative space situational awareness, space weather, and space policy and law. These broad categories became the basis for establishing four expert groups. This was a somewhat novel approach within COPUOS, but it had several advantages. Firstly, it allowed the discussions of four sets of issues to proceed in parallel, so the Working Group could make faster

progress in identifying candidate guidelines. Secondly, it offered a wider spectrum of possibilities for countries to engage in the WG discussions on topics of particular interest to them and at a level that they had national capacity to engage. Thirdly it allowed up to eight countries to serve as Chair or co-chair to one of the expert groups, which introduced wider participation and regional diversity into the WG process.

The expert groups concluded their work by mid-2014 and presented their reports and 31 candidate guidelines to the Working Group. Through a process of consolidation and streamlining, these guidelines were reworked by the Working Group and by 2016 consensus was reached on the first 12 guidelines. In hindsight, I would say that the Expert Groups were one of the reasons for the eventual successful outcome of the LTS discussions. Evidence of this may be seen in the fact that the first tranche of 12 guidelines that were adopted in 2016 were all guidelines that emerged from the expert group deliberations. The second tranche of guidelines was agreed in 2018 and COPUOS finally adopted the set of 21 LTS Guidelines in June 2019.

The Working Group operated under the same consensus rules as COPUOS. Although the formal meetings and decisions of the WG took place in the plenary meeting room, with simultaneous interpretation, much of the discussion, debate and negotiations happened during informal consultations on the margins of the meeting. Indeed, since Working Groups are normally scheduled to meet after the main Committee or subcommittee meetings, one of the challenges we encountered was having sufficient time to conduct the LTS Working Group meetings with interpretation, which is only possible during the scheduled meeting times (10AM–1PM and 3PM–6PM). Often, we would continue our WG meetings beyond 6PM, in English only. As Chair, I was extremely grateful for the forbearance of many non-English speaking delegations, who did not raise procedural objections, but instead did their best to allow the discussions to move forward. This is yet another example of the Vienna Spirit in action.

The Working Group also functioned intersessionally through email and we took the opportunity to meet on the margins of events such as the International Astronautical Congress, where many of the WG experts would be in any case.

Working Groups are open to all member States of COPUOS. This is often where the real action occurs, and the delegates can roll up their sleeves and work hard to find compromises to move forward. Much of the work is done in informal consultations, where delegates work together on developing compromise texts that are then put before the Working Group, and ultimately the Committee, for adoption. Working Groups also provide excellent opportunities for COPUOS delegates to forge close working

relationships that are so important to building consensus. I would therefore encourage delegates who are new to COPUOS to engage in one or more working groups, because this is where one can make a real and lasting contribution to the work of the Committee.

If you are an expert in the subject matter of a Working Group, I would encourage you to engage in that Working Group to the extent that your time, resources and capabilities permit, and take advantage of professional relationships to help build consensus from bottom-up technically based discussions. Working Groups benefit a great deal from the specialist knowledge and expertise of their expert members. States should seek out their best national experts to engage in WG discussions and should support their participation to the extent practicable. One of the challenges we experienced in the LTS WG was that it was not always possible for experts from developing nations to attend the COPUOS meetings in Vienna, but they could contribute to the intersessional work via email. I think that one of the consequences of the measures introduced to allow COPUOS to function during the COVID-19 pandemic is that it has made remote participation much more acceptable in diplomatic processes and I would like to encourage Working Group chairs and the Secretariat to continue to make use of hybrid methods of engagement to enrich the work of COPUOS working groups.

For those delegates who find themselves in the position of chairing a COPUOS working group, I can only say that this may be the most challenging, but also most rewarding assignment of your professional career. The role of the Chair is singularly important and often the outcome of a Working Group hinges on the skill and dedication of the Chair. Being Chair of a COPUOS Working Group is not a ceremonial appointment. It is hard work, not only during the sessions of COPUOS, but also during the intersessional periods. The Secretariat provides excellent support, but ultimately, it is up to the Chair to provide leadership and direction to the process, to engage as widely as possible with member States to identify where the possible avenues of consensus may lie, and to steer the discussion down the more promising avenues while avoiding the more perilous ones in an ongoing attempt to build consensus among member States. For the term of your mandate as Chair you will have the privilege of working with some of the smartest and most talented colleagues from around the world to add to the body of outputs of COPUOS, thereby contributing in a tangible way towards the preserving outer space as a domain of international cooperation for exploration and peaceful uses that benefit all humankind.

Peter Martinez

*Chair, Working Group on the Long-term Sustainability of Space Activities
(2010–2018)*

Working Groups at COPUOS

4.1 HISTORY OF WORKING GROUPS AT COPUOS

Working Groups have a long tradition in COPUOS. A Working Group is a forum for members of a larger body to meet and have focussed discussion of a single issue or limited group of issues. Working Groups are very common throughout the United Nations system, although their tasks and membership differ significantly, depending on which superior body established them. The first official Working Group was established under the main Committee in 1964, entitled the Working Group of the Whole.²⁹ COPUOS Working Groups are by default created as so-called “working groups of the whole,” meaning that they are open to (voluntary) participation by all States members of the Committee. While being characterized as working groups of the whole, with limited exceptions they have different names that allude to their main topic(s) of discussion. Although normally Working Groups meet during the sessions of COPUOS or its Subcommittees, it has become a practice for some Working Groups to hold informal intersessional consultations, either on the margins of other space conferences around the world or in the virtual meeting format. As these intersessional meetings are informal, no decisions are taken, and any progress made or understandings reached on the topic(s) of discussion must be ratified by the full Working Group during one of its formal meetings in Vienna.

4.2 CREATION OF WORKING GROUPS

Subject to approval and endorsement by the main Committee and the UN General Assembly, COPUOS Working Groups are usually created pursuant to a specific agenda item of either of the two Subcommittees. Working Groups are also often created under each new agenda item under a multi-year workplan. Working Groups may also be rarely created without being attached to a single agenda item under the Subcommittees, or may be created as integrated *ad hoc* Working Groups under the main Committee itself. It would also be possible to establish joint Working Groups under both Subcommittees, although none have been established so far.

By default, participation in Working Groups is a default option, they are only open to member States of the Committee. However, either the UN General Assembly or the main Committee may decide to open Working Groups to the participation of observers.

²⁹ This Working Group of the Whole was a Working Group of the main Committee, different from the Working Group of the Whole which currently exists as a Working Group under the STSC.

4.3 CURRENT COPUOS WORKING GROUPS

As of 2023, there are no working groups established directly under the main Committee of COPUOS. The most recent Working Group under the main Committee, on the “Space2030” Agenda, worked from 2018 to 2021.

4.4 CURRENT STSC WORKING GROUPS

Working Group of the Whole

The Working Group of the Whole was established under the STSC by UNGA Resolution 41/64 in 1986. In distinction to other Working Groups, the Working Group of the Whole is not connected to one single issue or agenda item of the STSC or the Committee. Originally, it was established to broadly monitor the implementation of the recommendations made by the UNISPACE II conference in 1982, which at the time was an agenda item of the STSC and Committee as well. Beyond the life span of this agenda item, the Working Group now considers a broad range of the use of space applications for socio-economic development. Many of the issues considered at one time or another by the Working Group have spawned new agenda items and sometimes new Working Groups focused on single issues. Examples are the “Space2030 Agenda” or the topic of “Space and Global Health.” The Working Group set up an Expert Group on Space and Global Health in 2015 to analyze the use of space technologies to promote global health.³⁰

Table 4.1 | List of Working Group of the Whole Chairs

1987	Gastón Lasarte (Uruguay)
1988	Carlos Amorín (Uruguay)
1989–1990	Raimundo González (Chile)
1991–1994	Muhammad Nasim Shah (Pakistan)
1995	Muhammed Jameel (Pakistan)
1996–1998	Muhammad Nasim Shah (Pakistan)
1999	Ulrike Butschek (Austria) (acting)
2000–2007	Muhammad Nasim Shah (Pakistan)
2008–2009	K. Radhakrishnan (India)
2010–2012	S. K. Shivakumar (India)
2013–2015	V. K. Dadhwal (India)
2016	Chiaki Mukai (Japan)
2017–2018	Mylswamy Annadurai (India)
2019–2020	P. Kunhikrishnan (India)
2021	Umamaheswaran R. (India)
2022	Prakash Chauhan (India)

³⁰ WG’s Terms of Reference: A/RES/41/64 (1986).

Working Group on the Use of Nuclear Power Sources in Outer Space

This Working Group has a long and successful history at COPUOS. Its most recent work product was the Safety Framework for Nuclear Power Source Applications in Outer Space (referenced previously in Chapter 1). This was a joint project with the International Atomic Energy Agency (IAEA), which is co-located with the UNOOSA and the seat of COPUOS at the UN Offices in Vienna (UNOV). The Working Group acts as a venue for the exchange of information on nuclear power source applications for space activities and promotes adherence to the non-legally binding documents it developed. It further continues to evaluate potential new technical topics suitable for additional work by the Working Group, subject to the approval of the STSC.³¹

Table 4.2 | List of Working Group on the Use of Nuclear Power Sources in Outer Space Chairs

1986–1987	not convened
1988–1989	
1990	J.H. Carver (Australia)
1991	not reconvened
1992–1995	J.H. Carver (Australia)
1996–1998	Dietrich Rex (Germany)
1999	no meetings held/not reconvened
2000–2004	Sam A. Harbison (United Kingdom)
2005	Alice Caponiti (United States)
2006–	Sam A. Harbison (United Kingdom)

Working Group on the Long-term Sustainability of Outer Space Activities

The first such Working Group, under the Chairpersonship of Peter Martinez (South Africa), was established in 2010 within the STSC. It studied issues of future concern to the long-term sustainability of space activities and was tasked to produce non-legally binding guidelines to reduce risks to the long-term sustainability of space activities. Based on the deliberations of its groups of governmental experts, the Working Group considered issues such as utilizing outer space to support sustainable development on Earth, space debris, mechanisms to promote cooperation on space situational awareness, space weather, and potential regulatory regimes. The Working Group reached consensus on a first set of guidelines in 2016 and a second set in 2018. The 21 guidelines were formally adopted by

³¹ WG's current workplan: A/AC.105/1138, annex II, paras. 8 and 9.

COPUOS in June 2019. The Committee further established a new Working Group on the Long-term Sustainability of Outer Space Activities under the STSC. This working group convened in 2021 under the Chairpersonship of Umamaheswaran R. (India) and is continuing to build on the outcomes of the previous Working Group on LTS under a new five-year workplan.³²

Table 4.3 | List of Working Group on the Long-term Sustainability of Outer Space Activities Chairs

2010–2018	Peter Martinez (South Africa)
2021–	Umamaheswaran R. (India)

Working Group on Space and Global Health

At its 61st session in 2018, the Committee decided to establish a WG on space and global health under the respective agenda item of the STSC. The decision mandated the chair of the new WG, together with the Secretariat, to devise a proposal for a multi-year workplan, also considering the role of the preexisting Expert Group on Space and Global Health under the STSC.³³

Table 4.4 | List of Working Group on Space and Global Health Chairs

2019–	Antoine Geissbühler (Switzerland)
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4.5 CURRENT LSC WORKING GROUPS

Working Group on the Status and Application of the Five United Nations Treaties on Outer Space

The Legal Subcommittee established this Working Group in 2001 to review the status and current application of the five UN space treaties as well as to generally promote space law. The Working Group has considered the concept of the “launching state” under space law in its practical application by States and has produced several questionnaires on a range of issues concerning space law. These allow members and observers of the Committee to voice their views on general as well as specific issues of space law under the five UN treaties, including their perception as to which parts of it constitute customary international law. The Working Group collects, analyzes and distributes these views for consideration by other States.³⁴

³² WG’s Terms of Reference: A/AC.105/1258, annex II, para. 7, and appendix.

³³ WG’s Terms of Reference: A/AC.105/1202, annex III, appendix).

³⁴ WG’s Terms of Reference: A/AC.105.763, para. 118.

Table 4.5 | List of Working Group on the Status and Application of the Five United Nations Treaties on Outer Space Chairs

2002–2004	Vassilios Cassapoglou (Greece)
2005	no meeting
2006–2009	Vassilios Cassapoglou (Greece)
2010–2015	Jean-François Mayence (Belgium)
2016–2022	Bernhard Schmidt-Tedd (Germany)

Working Group on the Definition and Delimitation of Outer Space

This Working Group was created by the UNGA in 1983. Until 2000, the Working Group was also mandated with issues concerning the utilization of the Geostationary Orbit. A short description of the major issues discussed by this Working Group and suggestions for further readings can be found in Chapter 3.7-Current Agenda Items under the discussion of the relevant agenda item of the LSC. In 2000, the Committee decided to limit the Working Group's deliberations to the matter of the definition and delimitation of outer space. Since 2000 the Working Group has mostly collected information by members of the Committee and observers on their national legislation or other views relating to the definition and delimitation of outer space. It has also produced a standing questionnaire on this issue as well as one on issues relating to suborbital flights. From 2021, under its new workplan this WG will only be reconvened every second year.³⁵

³⁵ WG's current workplan: A/AC.105/1243, paras. 61–62, and annex II, para. 9.

Table 4.6 | List of Working Group on the Definition and Delimitation of Outer Space Chairs

1984	Vicente Montemayor (Mexico)
1985	Ludek Handl (Czechoslovakia)
1986	Vicente Montemayor (Mexico)
1987	Gastón Lasarte (Uruguay)
1988–1989	R. Lagorio (Argentina)
1990–1994	Estanislao Zawels (Argentina)
1995–1996	Eugenio Curia (Argentina)
1997–1998	Gabriel Maffei (Argentina)
1999	Daniel Eduardo Amigo (Argentina)
2000	Héctor Raúl Pelaez (Argentina)
2001	Socorro Flores Liera (Mexico)
2002	Manuel Alvarez (Peru)
2003	Taous Feroukhi (Algeria)
2004	Déborah Salgado Campaña (Ecuador)
2005–2018	José Monserrat Filho (Brazil)
2019	André João Rypl (Brazil) (acting)
2020	no meetings held due to COVID-19
2021	André João Rypl t(Brazil) (acting)
2022	not reconvened (under new workplan)

Working Group on Legal Aspects of Space Resource Activities

At its 60th session in 2021, the Legal Subcommittee established the Working Group on Legal Aspects of Space Resource Activities under the agenda item General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources. The key legal issues considered are the compatibility of unilateral resource extraction, including by non-governmental entities, with the Outer Space Treaty's non-appropriation principle; the role, if any, that the Moon Agreement plays in these situations and how other treaty or non-legally binding rules may apply to the challenges posed by operationalized space resource extraction.

The Legal Subcommittee appointed Andrej Misztal (Poland) as Chair and Steven Freeland (Australia) as Vice-Chair of the Working Group. Under its terms of reference and five-year workplan, the Working Group is mandated to study legal issues relating to the exploration, exploitation, and utilization of space resources and, if considered necessary, to propose additional governance mechanisms for these activities. The Working Group is also mandated to devise an initial set of principles for the activities covered by its terms of reference.³⁶

³⁶ WG's terms of reference and workplan: A/76/20, Annex III.

Table 4.7 | List of Working Group on Legal Aspects of Space Resource Activities Bureau

2021–	Andrzej Misztal (Poland, Chair); and Steven Freeland (Australia, Vice-Chair)
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4.6 FUNCTION AND METHODS OF WORK OF SUBCOMMITTEE AND COMMITTEE WORKING GROUPS

COPUOS Working Group meetings are held mostly in conjunction with the sessions of the body which created them (e.g., the STSC, LSC, or main Committee), or in special cases, all sessions of the Committee and its subsidiary bodies. Working Groups are usually created only for a specific timeframe and under a pre-agreed upon multi-year workplan. The meetings are open to all members of the Committee, but normally closed to observers, unless observer participation is explicitly allowed in the agreed terms of reference and methods of work of a given WG. The Working Group meetings are scheduled during the normal plenary meeting times (10AM–1PM, 3PM–6PM) to take advantage of the full interpretation services available to the session. However, informal consultations without interpretation services are often held concurrently with ongoing Committee or Subcommittee meetings, which requires delegations of States members of the Committee to either employ more personnel for COPUOS sessions or to prioritize their staff's attendance at one meeting over another. Working Groups normally summarize their current status and progress during plenary meetings of the Subcommittee to which they report.

The Working Groups have a more interactive and open character and are the origin of every draft treaty, principles resolution, or other non-legally binding document recommended to the UNGA by COPUOS. The creation of a Working Group and agreeing on the terms of reference, mandate and multi-year workplan requires arriving at a consensus that can foreshadow the differing positions of States members on the respective issues. Furthermore, the Chairs or multi-person Bureaus of the Working Groups are expected to provide leadership with respect to the deliberations of the Group and the success of a particular Working Group in achieving its mandate is often due to competent and experienced chairs of WGs. The role of the Chairs is not only to guide discussions during the meetings, but also to conduct informal intra- and intersessional consultations, provide draft reports and other documents as a basis for discussion and synthesize the views expressed by members of the Committee into a text that can be adopted by consensus, usually with the support of a member of UNOOSA who acts as the Secretariat to the WG.

Drafted usually by the Chair or Bureau of the WG, several WGs have developed standing questionnaires for members of the relevant

Subcommittee and observers to share their views with respect to the WG topic under consideration. States, and observers where appropriate, submit their responses via notes verbale to UNOOSA, which collects and transmits them to the other members of the Committee and publishes them on its website. After their meetings, the WGs report to the body under which they have been created.

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The Secure World Foundation (SWF) is a private operating foundation that promotes cooperative solutions for space sustainability and the peaceful uses of outer space. The Foundation acts as a research body, convener, and facilitator to promote key space security and other space-related topics and to examine their influence on governance and international development. Founded in 2002, SWF was granted permanent observer status at the Committee on the Peaceful Uses of Outer Space (COPUOS) in 2008, and special consultative status with the United Nations Economic and Social Council (ECOSOC) in 2010.





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