

COPUOS: Current and Future Challenges

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The United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) has an impressive record of being in the vanguard for over sixty years in leading the development of multilateral treaties, principles, guidelines and best practices to assist states and non-governmental organizations in ensuring the safety, security and sustainability of outer space activities for peaceful purposes. However, there are currently several stresses and challenges relating to the governance of the Committee suggesting that COPUOS is in jeopardy of losing this leadership in providing this essential guidance for the global space community. In this article we outline some of these stresses and propose that COPUOS or the UN General Assembly (UNGA), to which the Committee reports, conducts a review and analysis of the organization and method of work of the Committee to determine if adjustments might be adopted in order to deliver its mandate more effectively.

Keywords: COPUOS, Outer Space Treaty, United Nations General Assembly, UNOOSA

1 INTRODUCTION

The United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS) has an impressive record of being in the vanguard for over sixty years in leading the development of multilateral treaties, principles, guidelines, and best practices to assist states and non-governmental organizations in ensuring the safety, security, and sustainability of outer space activities for peaceful purposes.¹ However, there are currently several stresses relating to the governance of the Committee, suggesting that COPUOS is in jeopardy of losing this leadership in providing this essential guidance for the global space community. If left void, developing this oversight and stewardship will be filled in other ways and by

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¹ United Nations Office for Outer Space Affairs, *Committee on the Peaceful Uses of Outer Space and its Subcommittees*, <https://www.unoosa.org/oosa/en/ourwork/copuos/comm-subcomms.html> (all websites cited in this article were accessed and verified on 6 Jan. 2023).

other actors who will not have the same global reach or universal acceptance as the Committee. Such a prospect has the potential to significantly weaken the spirit of the Outer Space Treaty² and its proposition that the exploration and use of outer space shall be the province of all humankind.

There have been several periods in the past that define evolving foci for the Committee. During the period 1962 to 1979, there was a flurry of remarkable activity that developed, in short order, the five space law treaties, namely: the Outer Space Treaty, the Rescue Agreement, the Liability Convention, the Registration Convention, and the Moon Agreement.³ In the years between 1979 and the early 1990s, COPUOS demonstrated leadership with respect to the evolution of several important principles in order to provide clarity in relation to pressing issues pertaining to outer space activities during that period.⁴ Since then, the Committee has provided recommendations on the proliferation of space debris (adoption of the COPUOS Space Debris Mitigation Guidelines in 2007)⁵ and to the issue of the Long-Term Sustainability of Outer Space Activities (LTS), leading to the adoption of the twenty-one LTS guidelines in 2019,⁶ with formal guidance in other areas of uncertainty or ambiguity being weak or lacking.

There are many reasons for this. The size of the Committee and the weakening of the so-called ‘Vienna Spirit’ (*see* section 5 below) are two such pressures. In addition, the way that activities in outer space are conducted, financed, managed, and led has changed dramatically even over the past decade and are far removed from the situation over sixty years ago when COPUOS first met and its *modus operandi* were established. By and large, however, the way that the Committee is organized and operates has not changed significantly over these more than six decades.

Below, we outline a few thoughts relating to these challenges on which we believe COPUOS needs to seriously deliberate if it is to continue to deliver the mandate to ‘govern the exploration and use of space for the benefit of all humanity: for peace, security and development’. We are of the opinion that none of the issues listed below are, in themselves, insolvable; ways can be found to negate or minimize their impact in order to improve the efficacy of the

² United Nations Office for Outer Space Affairs, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html>.

³ United Nations Office for Outer Space Affairs, *Space Law Treaties and Principles*, <https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html>.

⁴ *Ibid.*

⁵ United Nations Office for Outer Space Affairs, *Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space*, ST/SPACE/49 (2010), https://www.unoosa.org/pdf/publications/st_space_49E.pdf.

⁶ United Nations Office for Outer Space Affairs, *Guidelines for the Long-Term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space*, ST/SPACE/79 (2021), https://www.unoosa.org/oosa/en/oosadoc/data/documents/2021/stspace/stspace79_0.html.

Committee. The main concern is that, currently, and notwithstanding a recent consideration of the governance and method of work of the Committee,⁷ the UN General Assembly (UNGA) and COPUOS itself are not seriously committed to assessing, analysing, and making concrete recommendations on the structure of the Committee and its operations. We believe that such an assessment could lead to adjustments or adaptations in order to deliver its mandate more effectively, especially with respect to current major challenges that require broad, multilateral agreements sanctioned by all states conducting outer space activities.

2 BIFURCATION OF OUTER SPACE ACTIVITIES AT THE UNGA

For historical reasons, COPUOS reports to the Fourth Committee of the United Nations General Assembly (Special Political and Decolonization),⁸ where the attention to Outer Space issues is minimal. Meanwhile, security-related space issues are discussed in the First Committee (Disarmament and International Security).⁹ Consequently, the proposed COPUOS guidelines on Space Debris Mitigation in 2007, as well as the LTS guidelines in 2019, were presented to the Fourth Committee as part of the annual report of COPUOS, while the Group of Governmental Experts (GGE) on Transparency and Confidence Building Measures (TCBMs) in Outer Space (2012–2013)¹⁰ reported to the First Committee. It is significant here to note that five (out of fifteen) of the experts on the GGE on TCBMs were COPUOS delegates.

This dichotomy is a serious handicap and could potentially lead to diverging resolutions elaborated within these two Committees. Issues such as a ban on anti-satellite (ASAT) testing have a direct bearing on the ‘peaceful utilization of Outer Space’, and yet the Resolution for such a ban was presented and debated in the First Committee and not in the Fourth Committee – where the LTS guidelines were endorsed in 2019. Resolution 77/41 ‘Destructive Direct-ascent Anti-satellite Missile Testing’ was approved by the full General Assembly on 7 December 2022 with 185 votes in favour, nine against and nine abstentions.¹¹

⁷ Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space, *Governance and Method of Work of the Committee on the Peaceful Uses of Outer Space and Its Subsidiary Bodies – Note by the Secretariat*, A/AC.105/C.1/L.384 (25 Nov. 2019), https://www.unoosa.org/res/oosadoc/data/documents/2020/aac_105c_1l/aac_105c_1l_384_0_html/V1911140.pdf.

⁸ United Nations, *General Assembly of the United Nations, Special Political and Decolonization (Fourth Committee)*, <https://www.un.org/en/ga/fourth/>.

⁹ United Nations, *General Assembly of the United Nations, Disarmament and International Security (First Committee)*, <https://www.un.org/en/ga/first/>.

¹⁰ Christopher Johnson, *SWF Fact Sheet – The UN Group of Governmental Experts on Space TCBMs* (2014), https://swfound.org/media/109311/swf_gge_on_space_tcbms_fact_sheet_april_2014.pdf.

¹¹ UNGA Res. 77/41, *Destructive Direct-Ascent Anti-satellite Missile Testing* (7 Dec. 2022), <https://www.undocs.org/A/RES/77/41>; see also Theresa Hitchens, *US Call for Halting Kinetic Anti-satellite Tests Gets Boost from UN Vote*, *Breaking Defense* (9 Dec. 2022), <https://breakingdefense.com/2022/12/us-call-for-halting-kinetic-anti-satellite-tests-gets-boost-from-un-vote/>.

This dichotomy has another negative effect. It reduces the visibility of Outer Space in the overall UNGA Agenda. The GGE on TCBMs recognized this handicap and recommended that the UN secretariat organize regular joint sessions of the First and Fourth Committees to consider space-related issues. While these have been held in the form of a joint ad hoc meeting in 2015 and joint panel discussions in 2017,¹² 2019, and 2022, no formal statements or indications have been released by either Committee suggesting that closer collaboration between the two Committees on matters pertaining to outer space have been or are being developed.

A related issue of concern is the lack of communication and coordination between COPUOS and the Prevention of an Arms Race in Outer Space (PAROS) agenda item at the Conference on Disarmament (CD) in Geneva.¹³ One of the authors of this article had a direct experience of this disconnection: in 2008 the Canadian Ambassador to the CD, who acted as coordinator on PAROS, sent him an invitation to brief the CD Delegations on COPUOS progress on the space debris mitigation guidelines and early reflections on long-term sustainability. He made this presentation to a special PAROS-dedicated informal meeting of the CD convened in February 2008. He was surprised to discover that most CD delegations were not informed at all about COPUOS and its work. Some of them in fact ignored that there was another UN Committee, COPUOS, taking care of the non-security-related outer space issues.

A regular exchange of information of CD delegations on developments taking place at COPUOS and, reciprocally, a regular debrief to COPUOS about CD PAROS developments would be a useful improvement without any change in either body's terms of reference.

3 REPORTING STRUCTURE AND CONTINUING MANDATE

UN Resolution 1472 (XIV) of 12 December 1959, the resolution which created COPUOS as a permanent committee,¹⁴ provided little to no guidance as to how the Committee should organize itself in order to deliver on the requests of the UNGA as described in the resolution. Consequently, the Committee has by and large followed a flexible governance and operational process that relies on

¹² United Nations Office for Outer Space Affairs, *Joint Panel – First and Fourth Committees of the General Assembly: 'Possible Challenges to Space Security and Sustainability'*, <https://www.unoosa.org/oosa/en/ourwork/gajointpanel/index.html>.

¹³ Paul Meyer, *The CD and PAROS – A Short History*, UNIDIR Resources (Apr. 2011), <https://unidir.org/sites/default/files/publication/pdfs//the-conference-on-disarmament-and-the-prevention-of-an-arms-race-in-outer-space-370.pdf>.

¹⁴ United Nations General Assembly Resolution 1472 (XIV), *International Cooperation in the Peaceful Uses of Outer Space* (14 Dec. 1959), https://www.unoosa.org/pdf/gares/ARES_14_1472E.pdf.

precedent with no written constitution or set of rules. While this has, in general, served the Committee well, one of the interesting consequences of this situation is that the Committee must obtain approval of its annual report, that includes agendas for the Committee and Subcommittees for the following year, from the UNGA in order to have a mandate to hold its future sessions.

During the peak of the SARS-CoV-2 pandemic of 2020, no meetings could be held, and thus reports from the Committee and Legal Subcommittee for that calendar year could not be developed and delivered to the UNGA in the usual way. After much discussion, the Chairs and Vice-Chairs of the Committee and Subcommittees, working with the Committee's Secretariat, developed a limited report containing only essential items to ensure continuity, including proposed agendas for the Committee and Subcommittees for the following year.¹⁵ This abbreviated report was then circulated to all States members of COPUOS for ratification before being sent to the UNGA. Given the need for consensus on all decisions made by COPUOS (*see* section 5, below), there ensued a tense period when some member States refused to agree to the report insisting that certain issues of interest to them be included. Finally, at the (proverbial) 'eleventh hour', consensus was finally reached, and the brief report was provided to the UNGA and subsequently approved, providing COPUOS with a mandate for its sessions in 2021.

The above illustrates a serious weakness in the governance of COPUOS. As it now stands, if consensus cannot be reached on the annual COPUOS report to the UNGA, the report would not be delivered and the UNGA would have no basis on which to provide a mandate to the Committee and its Subcommittees to conduct their subsequent meetings. Furthermore, one state could, theoretically, put significant pressure on the Committee by refusing to agree to the report. Both of these situations are clearly possible, as demonstrated by the situation that arose in 2020, and solutions or ways to mitigate them should be seriously discussed in order to ensure that the Committee can continue to function if such crises arise in the future.

4 SIZE OF THE COMMITTEE

In 2022, COPUOS had 102 States members of the Committee, making it one of the largest committees within the UN system.¹⁶ On the one hand, this is to be celebrated as indicating that all nations interested in being part of the 'space club',

¹⁵ United Nations, *Decisions and Actions by the Committee on the Peaceful Uses of Outer Space and Its Legal Subcommittee Taken by Written Procedure* (12 Oct. 2017), https://www.unoosa.org/res/oosadoc/data/documents/2020/a/a7520_0_html/A_75_20E.pdf.

¹⁶ See United Nations Office for Outer Space Affairs, *Committee on the Peaceful Uses of Outer Space: Membership Evolution*, <https://www.unoosa.org/oosa/en/ourwork/copuos/members/evolution.html>, (updated annually).

whether developed or developing, can participate as equals in the debates, decisions, and new directions that the Committee is pursuing. On the other hand, the recent steady increase in membership is creating significant pressure on the Committee's stewardship, which, as noted, has not greatly changed since its inception in December 1958 with eighteen State members and when space activities were dominated by two states.

The Committee continues to follow its time-honoured tradition of permitting all members and any permanent observer organizations to request the opportunity to make statements with respect to any item on the agenda, which can include up to sixteen separate segments. Scheduling multiple agenda statements requested by States members and over fifty permanent observer organizations of the Committee during the current ten-day (Subcommittee) or eight-day (Committee) sessions, with two days of each session being dedicated to finalizing the reports, has become onerous. In addition, technical presentations, Working Group plenary discussions and reports, half-day symposia and special events, coupled with decreasing each half-day meeting from three to two hours as introduced in 2021 and continued in 2022, significantly add to the pressure.¹⁷

Recognizing these stresses, some efficiencies have recently been introduced such as providing a timekeeping device to limit statements of delegations to ten minutes and technical presentations to fifteen minutes.¹⁸ However, as the membership increases further and without new or revised methods of work, there will be a tendency for COPUOS to become a forum entirely dominated by informational statements and descriptions of national or organizational activities; a propensity that is already well established, especially during meetings of the main Committee. This leads to there being little time to debate and discuss during the plenary sessions the development of new ideas, best practices, and the need for and development of new binding or non-binding instruments. Consequently, the many challenges that the global space community faces in relation to activities or directions that were not considered when the binding treaties were conceived and ratified remain unresolved.

5 CONSENSUS AND THE 'VIENNA SPIRIT'

Decision making through consensus has been a hallmark of the Committee almost since COPUOS's creation in 1959. This way of working is a major contribution to

¹⁷ It is to be noted that the reduction of meetings with interpretation to two hours from the traditional three hours, together with the introduction of hybrid meetings by virtue of the SARS-CoV-2 pandemic during 2021 and 2022, is currently under review.

¹⁸ Committee on the Peaceful Uses of Outer Space – Scientific and Technical Subcommittee, *Governance and Method of Work of the Committee on the Peaceful Uses of Outer Space and Its Subsidiary Bodies*, A/AC.105/C.1/L.384 (25 Nov. 2019), https://www.unoosa.org/res/oosadoc/data/documents/2020/aac_105c_1l/aac_105c_1l_384_0_html/V1911140.pdf.

the so-called ‘Vienna Spirit’ – where political differences are at least partially set aside and informal discussions held amongst delegations in a spirit of transparency and confidence building. Over the years, and in spite of significant geopolitical issues, COPUOS has managed to work its way through the development of treaties, principles, and resolutions containing best practices and/or guidelines that have gained the consensus of the Committee and, subsequently, the UNGA.

However, two global situations have arisen over the past few years that threaten to severely jeopardize the Vienna Spirit. The first is the SARS-CoV-2 pandemic that forced the world into lockdown, and which, in turn, compelled the cancellation of the Legal Subcommittee and Committee meetings in 2020 and the holding of either fully virtual or hybrid COPUOS meetings in 2021 and 2022. By virtue of this situation, many delegations severely limited their attendance with many sending only their local, Vienna-based personnel to attend meetings in person and for experts and senior officials to deliver statements virtually. This significantly limited the opportunities for delegations to arrange substantive, informal discussions with colleagues on the margins of the meetings in order to develop the understandings and compromises necessary for obtaining consensus.¹⁹

Secondly, at a time of rising economic nationalism, right-wing populism, and authoritarianism, the world is currently witnessing a number of very serious geopolitical crises that have even more divided governments into entrenched camps. While we have witnessed similar divisions in the past, most notably during the Cold War between the Soviet Union and its allies and Western nations, the current divisions appear to be intractable and have severely compromised the Vienna Spirit. This lack of dialogue and intransigence between differing positions by virtue of non-COPUOS-related frictions was clearly demonstrated during the 2022 meetings of the Committee and Legal Subcommittee. This led to several unsettling situations including one State member effectively holding the Committee hostage with respect to any progress relating to multilateral dialogue or new initiatives.

Over time these tensions will be inevitably resolved in one way or another. However, given the urgent need to provide guidance on current challenges to outer space governance and the unique nature of the Committee, a paralysis of the Committee for any length of time would be highly unfortunate. The inevitable fallout of such a situation will be the development of legal and policy instruments, including guidelines and best practices, by individual states or groups of states concerning areas of current uncertainty (*see* section 6, below). This has the potential of leading to the circulation of multiple sets of conflicting, inconsistent

¹⁹ *See ibid.*

guidelines external to COPUOS resulting in undesirable fractionalizations, further exacerbating the breakdown of the Vienna Spirit.

Given these schisms, coupled with the threat of a veto hanging over all new initiatives given the consensus principle currently followed, the possibility of COPUOS leading new, multilateral initiatives relating to urgent challenges does not look promising.

6 PACE OF DEVELOPING NEW RESOLUTIONS OR RECOMMENDATIONS

One of the frustrations often expressed about COPUOS is the time that it takes to reach agreements related to issues within the Committee's purview. As a case in point, the topic of the LTS provides an interesting example. Issues pertaining to LTS, specifically space debris, were initially raised during the third United Nations Conference on the Exploration and Peaceful Uses of Outer Space - UNISPACE III in 1999.²⁰ This topic was further promoted by the Chair of the Scientific and Technical Subcommittee (STSC) (2002–04), and by one of the authors (Gérard Brachet), the Chair of the Committee (2006–08).²¹ However, it was not until 2010, and through a proposal by the French delegation to COPUOS in 2009,²² that the STSC established a Working Group on LTS and tasked it with producing a consensus report containing voluntary best-practice guidelines for all space actors to help ensure the long-term sustainability of outer space. Originally intended to be finalized by 2014, later extended to 2016 and, later still, to 2018, the Working Group achieved consensus on twelve of the then-proposed twenty-nine guidelines in 2016, and a further nine in 2018, establishing the twenty-one guidelines that the Committee endorsed in 2019²³ after a last-minute refusal by one state to agree in 2018 (in spite of being an active member of the Working Group).

While this exercise reinforces the fact that important, consensual agreements can be achieved within the Committee, it also illustrates the very difficult and

²⁰ United Nations General Assembly, *Report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna 19-30 July 1999* (UNISPACE III Report), A/CONF.184.6, https://www.unoosa.org/pdf/reports/unispace/ACONF184_6E.pdf.

²¹ Committee on the Peaceful Uses of Outer Space, *Long-term sustainability of outer space activities, Preliminary reflections, Jan. 2010*, A/AC.105/C.1/2010/CRP.3 (8 Feb. 2010), https://www.unoosa.org/pdf/limited/c1/AC105_C1_2010_CRP03E.pdf.

²² Committee on the Peaceful Uses of Outer Space, *Proposal for the Inclusion of a New Item on the Agenda of the Scientific and Technical Subcommittee, Beginning at Its Forty-Seventh Session, in 2010 – Working Paper Submitted by France*, A/AC.105/L274 (21 May 2009), https://www.unoosa.org/pdf/limited/l/AC105_L274E.pdf.

²³ Report of the Committee on the Peaceful Uses of Outer Space, Sixty-second session (12–21 Jun. 2019), UN General Assembly document A/74/20, *Annex II: Guidelines for the Long-Term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space*, https://www.unoosa.org/res/oosadoc/data/documents/2019/a/a7420_0_html/V1906077.pdf.

careful process that must be conducted over a considerable period of time for the Committee to reach the necessary compromises. As noted above, given the recent rapid increase in the size of the Committee, coupled with the breakdown of the Vienna Spirit, obtaining consensus on any topic with COPUOS's current organizational processes is likely to become even more challenging.

Based on this experience, it has been publicly acknowledged²⁴ by the United States of America (USA) that this state decided to take an independent route outside of COPUOS in developing principles for cooperation in the civil exploration and use of the Moon, Mars, comets, and asteroids for peaceful purposes, otherwise known as the Artemis Accords.²⁵ As of writing, this initiative has been formally endorsed by twenty-one States members of the Committee including those from North, Central and South America, Europe, Asia, Australasia, and the Middle East. While these principles have been presented at COPUOS and the USA has translated them into the five other official UN languages besides English, there is as yet no agreement within the Committee to develop a multilateral process relating to the items outlined in the Accords, except in the specific situation relating to space resources. Furthermore, it has been reported that the Russian Federation together with China are developing a parallel set of principles relating to space exploration of the Moon with reference to a planned joint International Lunar Research Station.²⁶

We believe that the development of the Artemis Accords should be a wakeup call to the Committee. Given the decision by the USA and its partners to bypass COPUOS as the trusted forum in which to raise and debate such initiatives, there will be an impetus for states and/or groups of states to develop their own guidelines and practices relating to current grey areas in space governance, circumventing COPUOS's traditional role of seeking a consensual multilateral entente on such matters.

7 SUBCOMMITTEE SILOS

COPUOS has, from its very beginning, worked through two Subcommittees: the STSC and the Legal Subcommittee (LSC). Early in the life of COPUOS, this division worked well as there was little overlap between the topics discussed by the two Subcommittees. This led to them working mostly independently from each

²⁴ Mike Wall, *8 Nations Sign US-Led Artemis Accords for Moon Exploration and Beyond*, Space.com (13 Oct. 2020), <https://www.space.com/eight-nations-sign-artemis-accords-moon-exploration>.

²⁵ National Aeronautics and Space Administration, *Artemis Accords – Principles for a Safe, Peaceful, and Prosperous Future*, <https://www.nasa.gov/specials/artemis-accords/index.html>.

²⁶ Andrew Jones, *China, Russia Reveal for International Moon Base*, SpaceNews (16 Jun. 2021), <https://spacenews.com/china-russia-reveal-roadmap-for-international-moon-base/>.

other with any cross-disciplinary issues or questions being resolved at the Committee level. Today, however, there is significant overlap in the topics being discussed by the two Subcommittees.

Almost all areas currently being discussed by COPUOS have scientific, technical, legal and policy implications. There is thus a pressing need for cross-fertilization and information sharing by the various experts who attend the Subcommittee meetings. Yet, working groups are historically independently established by one or other of the Subcommittees with no imperative to discuss, inform, or obtain counsel from the other Subcommittee.

Recently, it has become evident to many delegations, as reflected in their formal statements to the Committee,²⁷ that for these working groups to develop their recommendations systemically, incorporating all relevant and requisite information, inputs from both scientific and technical experts as well as legal and policy specialists are required. Unfortunately, in spite of these voices and statements, there currently is limited momentum to put in place any formal process whereby working groups interact with and integrate the expertise and advice available in both Subcommittees.

8 LACK OF FORMAL INPUT AND DISCUSSION WITH THE PRIVATE SECTOR

Much of the current excitement and energy related to outer space activities is due to the tremendous and unprecedented explosion of ideas, developments, innovations, and funding provided by the non-governmental sector. Every major space agency has accepted that their principal role is to help foster and support their domestic, private sector organizations in the development of competitive outer space initiatives. This is to create high-reward jobs, safeguard and support highly qualified citizens, retain strategic intellectual property and generate wealth for the nation within a global enterprise that is growing at an annual rate of 9% year-over-year (2021)²⁸ and is forecast to burgeon above USD 1 trillion by 2040.²⁹

Many of these private sector organizations have or are developing transformative and disruptive activities that are redefining both upstream and downstream

²⁷ See e.g., Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee, *Governance and Method of Work of the Committee on the Peaceful Uses of Outer Space and Its Subsidiary Bodies Note by the Secretariat, A/AC.105/C.1/L.384* (25 Nov. 2019), at s. II. 8, https://www.unoosa.org/res/oosadoc/data/documents/2020/aac_105c_1l/aac_105c_1l_384_0_html/V1911140.pdf.

²⁸ The Space Foundation, *Space Foundation News – Space Foundation Releases the Space Report 2022 Q2 Showing Growth of Global Space Economy*, <https://www.spacefoundation.org/2022/07/27/the-space-report-2022-q2/>.

²⁹ Michael Sheetz, *Investing in Space – The Space Industry Is on Its Way to Reach \$1 Trillion in Revenue by 2040, Citi Says*, CNBC (21 May 2022), <https://www.cnbc.com/2022/05/21/space-industry-is-on-its-way-to-1-trillion-in-revenue-by-2040-citi.html>.

areas of the space domain. They are also pushing at the boundaries of the current global governance framework – a set of treaties and principles that were developed long before this aspect of outer space activities was envisioned.

Given the pre-eminence of the private sector in current space activities, it is essential that this sector is fully represented when the rules governing outer space activities are discussed and updated. Since commercial enterprises are currently prohibited from being directly engaged in the formal Committee and Subcommittee meetings as well as in Working Group meetings, except as silent observers as members of national delegations, approaches need to be found to ensure that the concerns and aspirations of this sector are both listened to and taken into account as new rules are discussed and formulated. One way forward could be for COPUOS to consider how the International Telecommunications Union (ITU), a specialized agency within the UN system, has developed over the years a pragmatic mechanism to involve the commercial sector while keeping the final decision making to the ITU Plenipotentiary Conference.³⁰

9 CONCLUSION

The above lists some of the pressures and challenges that are important for COPUOS to discuss and act upon in order for the Committee to continue its illustrious history of providing global, multilateral solutions and leadership to current and future deficiencies, ambiguities, and weaknesses in the governance of outer space. There are examples, both within the United Nations system and without, where committees and/or organizations have looked hard at their governance in light of changing circumstances or environments and developed new methods of work, or reinvented themselves in order to resolve similar issues.

However, the first and most important aspect of such renewal is to recognize that there is an issue with the existing arrangement, an awareness that is currently not at the top of the agenda amongst the majority of COPUOS delegations. In order to move forward, the Committee and/or the UNGA needs to take steps to seriously reflect on the efficaciousness of COPUOS given the current and near future situation. A meaningful dialogue and analysis of how the Committee can be refashioned is urgently required to ensure that it continues to be the unique global forum and arbitrator in all matters pertaining to the peaceful uses of outer space.

As a final word, COPUOS is currently the only organization with the reach, heritage, history, stature, and authority to develop truly global agreements relating

³⁰ Audrey Allison, Diane Howard, David Kendall and Mark Skinner, *A Modern Model of Space Law Creation: What Can COPUOS Learn from the ITU?*, IAC-21-E3.4.6, 72nd International Astronautical Congress (IAC), Dubai, UAE, 2021.

to the peaceful uses of outer space. Given current challenges, the world needs a revitalized COPUOS more than ever if we are to preserve the spirit of the preamble of the Outer Space Treaty:

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development,

Desiring to contribute to broad international cooperation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes,

Believing that such cooperation will contribute to the development of mutual understanding and to the strengthening of friendly relations between states and peoples