

**SPACE SECURITY AND THE LAW OF INTERNATIONAL SPACE
COOPERATION: THE NEED FOR LEADERSHIP AND COORDINATION**

*PJ Blount**

INTRODUCTION

History may look back at the mid-2010s as the beginning of the breaking point of the international global order that emerged at the end of World War II. As populist politics swept the globe from Asia to Europe and North America, the world saw a marked retraction from states engaging in the international order meant to maintain international peace and security.

Interestingly, international cooperation is a bedrock principle of this order and is a critical component in international space law and policy. As a legal norm, it can be traced from the earliest United Nations debates on outer space, and it emerged out of a unique Cold War security environment, which understood cooperation and communication as necessary features of ensuring that the space environment is used for peaceful purposes for the benefit of all humankind. While international cooperation, as a principle, still maintains a central place in state space activities, in the post Cold War security environment, the cohesion that cooperation once ensured is fracturing in contemporary international relations. Commercial activities, rouge state development of space activities, and quickly developing

* Post-Doctoral Researcher, Faculty of Law, Economics and Finance, University of Luxembourg.

capabilities have all put strains on the legal regime and the security that it seeks to maintain.

Amidst this fracturing system, the space environment represents a unique example that illustrates the need for international cooperation, not only for its benefits to the space environment but for the benefits that it can have on earth. As space activities and actors continue to change, it would be a mistake to allow enmity among states to undercut the potential that space has for bringing benefits to global society and populations. This paper will argue that international cooperation is a critical component to ensuring the long-term sustainability of space and maintaining security stability terrestrially. Further, it will argue that states should reassess the role of international cooperation in their diplomatic endeavors and that international cooperation should be a component of domestic space law regimes.

This paper will first briefly sketch out the legal conditions that underpin international cooperation with specific reference to the regime established by the UN Charter and the Outer Space Treaty. It will then give an account of anti-cooperative trends in the global diplomatic community. This section will look at trends in such bodies as the United Nations Committee on the Peaceful Uses of Outer Space, the Conference on Disarmament, and the negotiations of the outer space Code of Conduct. Additionally, it will connect these trends to the larger trend of national politics retracting from the international order. Finally, it will argue that states can enhance

their security significantly through the pursuit of international cooperation and that space serves as a unique forum in which to foster this cooperation. This section will argue that states need to reengage with the diplomatic processes that are meant to ensure bilateral and multilateral cooperation. It will also argue that, in light of the recent proliferation of domestic space legislation, states should seek to extend the legal principle of cooperation into their domestic arenas to avoid future conflict.

INTERNATIONAL COOPERATION

In current debates over commercial development of the uses of outer space, it is often forgotten that the legal regime for outer space is centered on ensuring international peace and security. While advocates of commercial development often rely on a rhetoric of enmity between states by stressing concepts like “the new space race,” the treaty system places emphasis on international cooperation. Indeed, international cooperation is more than just a passing phase in the Outer Space treaty; it is mentioned seven times: twice in the preamble, once in Article I, Article II, Article IX, Article X, and Article XI. Indeed, “international cooperation appears as the most prevalent theme in the Outer Space Treaty.

The prominence of the phrase in the Outer Space Treaty is an important indicator of the intention of the negotiators of the treaty to extend the multilateralism that emerged in the wake of World War II. Rather than the enmity of the Cold War, the negotiators

sought to emphasize the power of cooperation as a security stabilizer in space. International cooperation is a legal obligation or duty between and among states, that is meant to help ensure multilateralism over the division in space. The post-WWII environment was marked by the fear of a global war with nuclear weapons, and the advent of space technology shrunk the temporal realities of such a war to hours, in the case of ICBMs, or minutes, in the case of space-based nuclear weapons. Cooperation and communication became critical elements of the security regime as a way of building trust and confidence between nations.

This value has been consistently emphasized in United Nations documents. The second resolution that the United Nations General Assembly (UNGA) passed on outer space activities, in 1959, was titled the International Co-operation on the Peaceful Uses of Outer Space.¹ Resolutions on international cooperation have been consistently adopted by the UNGA ever since and are currently adopted on an annual basis, the most recent being in 2018.² This most recent resolution notes

. . .the importance of international cooperation in developing the rule of international law, including the relevant norms of international space law and their important role in international cooperation for the exploration and use of outer space for peaceful purposes,

¹ UNGA Res. 1492 (XIV) International Co-operation on the Peaceful Uses of Outer Space (1959).

² UNGA Res. 73/91 International Cooperation in the Peaceful Uses of Outer Space (2018)

and of the widest possible adherence to international treaties that promote the peaceful uses of outer space in order to meet emerging new challenges, especially for developing countries

Despite the emphasis on international cooperation, the legal obligation itself is highly aspirational and ill-defined. There are no specific requirements supporting the idea of international cooperation. The UN General Assembly attempted to add flesh to the bones of international cooperation with its 1996 Benefits Declaration, which sought to add a better definition of how states should share the benefits of outer space activities.³ This resolution states that “States are free to determine all aspects of their participation in international cooperation in the exploration and use of outer space on an equitable and mutually acceptable basis.”⁴ As a result, cooperation can be said to be required on a best effort basis. Therefore, despite the fact that international cooperation is a legal obligation, it is one that is seemingly unenforceable. Instead, international cooperation is meant to support the security regime in outer space by encouraging states to behave in a multilateral manner.

It is important to remember that while International Cooperation is a legal obligation, it is, at the same time, a political tool. Since states are able to determine the terms on which they will cooperate

³ UNGA Res. 51/122 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 (1996).

⁴ *Id.* at Annex para. 2.

with other states, such cooperation is often offered as a carrot to allies and can be withheld from adversaries as a stick. That is not to say that it can not have a role in fostering friendly relations among adversaries. Examples such as the *Apollo-Soyuz* mission, which saw the docking of an American and a Soviet Spacecraft in the midst of the Cold War, show that states can use international cooperation as a way to diffuse adversarial relations. However, such missions remain the exception rather than the rule. Rather, states tend to engage in cooperative space activities with their allies.

ANTI-COOPERATIVE ACTIVITY IN SPACE

While the space law regime places international cooperation center stage, states have begun to move international cooperation to the sidelines. Though the United States and the USSR consistently cooperated in space activities throughout the Cold War, adversarial states have slowed in their cooperative activities. This can be seen in a number of international bodies that work on space activities.

The first of these is the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS). Scholars have long noted that UNCOPIOS has slowed in its activities of positive lawmaking. UNCOPIOS has transitioned from a lawmaking body to a body mostly concerned with multilateral communication.⁵ While it is debatable as to whether this represents ineffectiveness

⁵ See generally, Sergio Marchisio, "The Evolutionary Stages of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS)," *J. Space L.* 31 (2005): 219.

in the body,⁶ it is a marked contrast from its first 30 years of its activities.⁷ UNCOPUS' lack of movement in addressing emerging technologies and new paradigms of space activities is indicative of an inability to gain consensus within the body, which works on a principle of consensus. This is certainly attributable to the changed dynamics in the body in the post Cold War context, which has led to multipolarity in the negotiations in the body. Indeed, the globalized context might be a strong reason for the retraction from cooperation as it has resulted in the branching of state interests away from those held by superpowers. This is not to say that this new context is somehow less desirable than the Cold War context, but rather than that, it has made it more difficult to gain consensus despite the known challenges facing the space environment.

A more salient example may be international engagement in establishing a regime for the non-weaponization of space or the prevention of an arms race in outer space (PAROS). The Conference on Disarmament (CD) has been central to the efforts to establish such a regime. It is the sole international body for negotiating multilateral disarmament agreements, and it also works on a consensus method. Consensus has its drawbacks in this context as well, and the CD has been deadlocked for close to two decades due to an inability to adopt an agenda, which must occur

⁶ See generally, Brian Israel, "Treaty Stasis [Agora: The End of Treaties?]," *AJIL Unbound* (blog), May 8, 2014, <https://www.asil.org/blogs/treaty-stasis-agora-end-treaties>.

⁷ Brian Israel, "Treaty Stasis [Agora: The End of Treaties?]," *AJIL Unbound* (blog), May 8, 2014, <https://www.asil.org/blogs/treaty-stasis-agora-end-treaties>.

on an annual basis and is a precursor for the work of the CD. This deadlock has effectively put an end to any hope of progress being made on a treaty banning weapons in space, and formal discussions on PAROS in this forum have been stilted.

A third failed forum is the European Union's attempt to pass a Code of Conduct for space activities. This Code of Conduct was first introduced in 2008.⁸ The idea underpinning this initiative was to escape the deadlock of CD and open up a new forum for discussion of space security issues. Thus, the Code of Conduct was designed as a nonbinding, political agreement, which freed it from the constraints of the CD. As such, the European Union hoped to advance the discussion over space security and provide a mechanism through which states could agree to rules of the road that may serve as a foundation for positive law. After several rounds of negotiations, the European Union called for a negotiation of the instrument in 2014. The high hopes for this negotiation were dashed on the first day of the negotiation as states objected to both the procedure of the negotiations and the substance of the Code of Conduct.

In all three of these cases, one of the central problems is that the major space powers are becoming more divided on space cooperation and functioning as spoilers rather than leaders. These states seem to be more interested in maintaining the permissive but

⁸ Paul Meyer, "The Diplomacy of Space Security: Whither the International Code of Conduct?," *Simons Papers in Security and Development*, 8 (Vancouver: Simon Fraser University, 2014), <http://summit.sfu.ca/item/14921>.

unstable status quo than leading cooperative efforts to secure and stabilize outer space. The case of the United States is emblematic in this sphere. During the George W. Bush administration, the policy of the US was not to negotiate any new rules that may restrict United States action in outer space.⁹ This policy, in part, led to the deadlock of the CD as the United States refused to agree to an agenda containing PAROS as an item for work by the CD. Further, this led to the United States voting against United Nations General Assembly resolutions on the PAROS, despite the fact that these resolutions were nearly unanimously adopted with only one to two allies voting in concert with the United States. While this explicit policy of the Bush administration has been retracted, it still seems to be part and parcel of the United States' approach to space diplomacy. Further, though the United States still cooperates with Russia on the *International Space Station (ISS)*, cooperation between the two states has cooled substantially as the two states have retrenched into adversarial positions. Additionally, the United States refrains from cooperating with China on space activities entirely, and there is US legislation that bars the National Aeronautics and Space Administration from pursuing cooperative activities with China – the United States' biggest trading partner.¹⁰

China and Russia, on the other hand, often rely on the United States' willingness to break consensus but seem just as unlikely to

⁹ NSPD 49: U.S. National Space Policy (2006).

¹⁰ Consolidated and Further Continuing Appropriations Act, 2012 Public Law 112-55, Sec. 539 (2012).

adopt leadership positions in space. These states jointly introduced a draft treaty on the Prevention of the Placement of Weapons in Outer Space to the Conference on Disarmament, which can be seen as a substantive move towards advancing the debate on space security. However, these two states also led the movement to block the negotiations on the EU's Code of Conduct. They both argued that the negotiation on such an agreement should be held in an established multilateral forum rather than an *ad hoc* forum. Predictably, they endorsed the CD as the proper forum for the negotiation despite the CD's inability to move forward on any substantive work.

These three states seem more concerned with maintaining the status quo than pursuing international cooperation likely because they see it as their strategic advantage to maintain a permissive space environment. This can be indicated by the lukewarm response of these three states to the Indian Anti-satellite (ASAT) test in 2019. All three of these states have reliance and thus vulnerability on their space assets, none of them condemned the Indian ASAT demonstration despite the fact that it was a debris creation event. President Modi of India stated after the test that

Today March 27, a short while ago, India has achieved remarkable success. India has today established itself as a global space power. So far, only three countries in the world - USA, Russia and China had this capability. Today, India has become the fourth country to acquire

*this status as a space power. There can be no bigger moment of pride for every Indian than this.*¹¹

This characterization by President Modi is significant in that it reveals an international perception that space power comes from military might and demonstrations rather than from the civil achievements that characterized space power in the Cold War. This perception is not without its foundations. Current US rhetoric surrounding the planned space force shows US President Trump openly discussing the deployment of offensive weapons in space.¹²

This situation is not likely to change in the near term as there is a significant movement globally for states to retract from multilateralism and the international community. The United States and parts of Europe have made moves towards populist politics, and Russia has continued a shift towards authoritarianism under President Putin. The unraveling of the international global order could have dramatic effects on space security as the space regime is based on cooperative coordination of space activities. The lack of leadership by space powers will continue to see the domain further destabilized.

¹¹ “Mission Shakti: Read PM Narendra Modi's full speech announcing how India took down satellite,” *India Today*, (27 March 2019) <https://www.indiatoday.in/india/story/mission-shakti-narendra-modi-full-speech-1487838-2019-03-27>.

¹² Space Policy Directive-4: Establishment of the United States Space Force (19 February 2019) <https://www.whitehouse.gov/presidential-actions/text-space-policy-directive-4-establishment-united-states-space-force/>

INCREASING SPACE SECURITY THROUGH COORDINATION AND COOPERATION

Much of the reason that states have turned away from multilateralism is that they are retracting in pursuit of their own perceived national security goals. These states see the international community and globalization as a threat to their national interests. These short-sighted views ignore the lessons of WWII, which was also driven by populist politics and nationalism. The post-World War II order founded by the Charter of the United Nations was an attempt to keep such politics in check and prevent conflict by opening truly multilateral fora for interstate relations. While this project has not been perfect, it for decades, held back enmity among states and had a significant role in ensuring that the Cold War did not turn hot. The reemergence of populism and nationalism is in part, attributable to the deficiencies in the United Nations system, but it fails to recognize the role of multilateralism in international peace and security in a world of advanced technologies that are changing the face of conflict.

The space domain is an excellent example of how multilateralism can lead to increased security. An accident or intentional attack in outer space affects all space actors by creating instability in space through the creation of space debris. Space itself depends on cooperation and coordination for effective use by national security actors, civil actors, and commercial actors. For example, the effective and efficient use of the geostationary orbit requires that

states cooperate in its use and in coordinating their activities in this region of space. Without multilateral efforts by states to preserve this orbit, its use could be ruined for all states leading to insecurity not just in space but terrestrially. This is not a new lesson. Early in the Space Age, both the United States and the Soviet Union recognized the destabilizing effects that their space activities could have on the environment. In the early 1960s, these states were both pursuing military and civil space programs, and they both came to the conclusion that weaponization and destructive activities in space were inimical to their civil aspirations. Specifically, both states came to the conclusion that nuclear testing in the space domain was untenable if human exploration was to be sustainable.¹³ This conclusion led to the negotiation of the Partial Test Ban Treaty of 1963, which banned nuclear tests in outer space, the atmosphere, and underwater.¹⁴

This lesson and the need for coordination and cooperation is still very important for outer space, which is increasingly characterized as congested, contested, and competitive. Importantly, this characterization has military roots, and indicates the concern of militaries that their space activities are put at risk not just by other military actors, but by civil and commercial actors as well. While military activities make up a substantial portion of space activities,

¹³ See James Clay Moltz, *The Politics of Space Security: Strategic Restraint and the Pursuit of National Interests*, Chap. 4 (Stanford, CA: Stanford Security Studies, 2008).

¹⁴ "Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space, and under Water," October 10, 1963.

in a globalized world, more states are engaging in space activities, and there has been a marked proliferation of commercial actors. As a result, the entire environment will be dependent on international cooperation to coordinate if those space activities are to be sustainable. Space is a domain in which unilateral action can have a marked effect on the stability of the entire environment. If states remove themselves from the international multilateral legal and political system governing space, such coordination will become increasingly difficult. A lack of coordination will place military activities at risk and also place at risk a multibillion-dollar industry.

An example of this need for coordination is the area of Space Traffic Management (STM). STM is the technical and legal framework for coordinating space activities so that they avoid interference with other space activities. To date, outside of the previously mentioned Geosynchronous orbit, there is no multilateral system for coordinating space activities. This is problematic for both military and nonmilitary users of space since unilateral action by a state cannot protect one's space activities from external actors. While there is wide agreement that an STM system of some sort is needed, there seems to be a little international movement towards the development of such a system, despite the fact that it would be in the interest of all actors. This lack of movement is primarily the result of security concerns. States are reluctant to share space situational awareness (SSA) data on their military assets with other states as they feel like it will

place these assets at an increased targeting risk, and states are currently reluctant to negotiate new rules governing space activities. Despite these concerns, cooperative efforts at coordination could present a way to alleviate some of these concerns by presenting clear communication channels through which states and coordinate activities. Such a system would fall below the level of “management” of the space environment but could increase stability in the absence of formal and binding law.

Such systems of cooperation may be an important way forward in the development of space law. By providing clear rules for communication – rather than clear rules of control – such systems can increase stability without trampling perceived state interest. Further, these systems can become incubators for gaining a better understanding of responsible and sustainable space activities. As practice within coordination systems evolve over time, we will have a clearer picture of how the law and policy of space should develop in light of emerging actors and emerging space technologies.

CONCLUSION

The world relies on space, and international cooperation is a critical component to ensuring space security. More importantly, international cooperation is a key component instilled in the UN Charter regime to ensure terrestrial security. States should remember the lessons of the past and that putting themselves

“first” does not always lead to being “great.” Indeed, in domains such as space, it can lead to global insecurity.

As space activities continue to develop and proliferate, there is a need for increased cooperation to ensure that the space environment is preserved for future generations. The benefits that are achieved from space are important to global society, and if the space environment is degraded these benefits and their ability to be shared with humanity will be markedly decreased. It is time for an increased understanding of the space environment and retrenching of international cooperation. The international space law regime was not built to serve nationalistic politics. Instead, it was created to ensure that space benefitted all humankind, and the infusing of populist politics into the space domain is contradictory to the basic ethical and legal principles governing outer space.

Cooperation presents a way forward as it can create the structures that are needed for states to coordinate their space activities. Cooperation, however, will require leadership in space and it is unclear as to where that leadership will come from in the current state of geopolitics. The major space players seem more focused on blocking substantive steps forward than developing the system to serve the interests of all. This is a folly, and hopefully, it can be overcome before the space environment is destabilized beyond repair.