Part I

General principles of international space law
Sources and law-making processes relating to space activities

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Introduction: contextualizing space law

While most people are familiar with the five core space treaties, there is much more to international space law than these five instruments. Because space law is embedded in the larger system of public international law, much of “general international law” applies to space and space activities. Furthermore, as discussed in the introductory chapter, space law is made up of national laws which interact with the international system. In order to understand the larger corpus juris spatialis, or body of space law, it is necessary to understand its place in both the international system and the various national systems. Since a comparative analysis of domestic laws is undertaken in Part III of this book, the intention here is to contextualize the different sources of space law and the different law-making processes.

Sources of law can be defined as the systems or processes that allow law to come into being.¹ If a rule or norm is attested by one of the recognized sources, then it may be accepted as part of the system of law.² If it cannot be attested by one of these sources, then it is a mere assertion, and cannot be binding on any international actor. Thus, understanding the doctrine of sources in public international law is necessary in order to clarify what is binding in space law and what is mere interpretation or assertion. It is also important to understand the relationship between national space laws and sources of international space law.

Law-making processes in the domestic context

In domestic legal systems, the sources of law are easily recognizable: primary legislation is passed according to the processes prescribed in the constitution of a State, and by the legislative bodies. Domestic space laws are applicable within a State’s jurisdiction; for example, in the United States (US), the Federal Aviation Authority (FAA) has been granted certain powers by the federal government to issue launch licenses to US companies as well as to foreign companies

¹ Ram S. Jakhu & Steven Freeland, The Sources of International Space Law (Beijing, 2013) at 461.
wishing to use US launch services. However, even though its legislation may have some effects on foreign companies or on relations between the US and other States, the US cannot legislate extra-territorially or internationally. Every State is sovereign, meaning no State can bind another with its legislation. This is both a limit on national sovereignty and also a protection of it, and, apart from being strongly asserted by States, it is also guaranteed in Article 2(7) of the Charter of the United Nations (UN).\

Law-making processes in the international context

In international law, there are no constitutional law-making mechanisms, and no centralized law-making powers.\(^4\) It may therefore not be obvious how law comes into being or who is authorized to make law. In the following section, attention will be paid to each of the traditionally recognized sources of law.

The traditional understanding of international law is that the content and normative force of international law are an expression of the will of States.\(^5\) International law is binding because States have consented to it through the creation and recognition of various obligations and rights. This consensual basis is, for most governments, what gives international law its legitimacy.\(^6\) However in recent decades there are more and more non-State actors, such as international organizations, corporate entities, and individuals, who play an increasingly important role in the international plane in many areas of law, e.g., human rights, environmental law, the law of armed conflict, international investment and trade law. These areas of law are also relevant for space activities. International law today is therefore recognized as an order governing international and transnational relations, including non-State actors.

While a formal understanding of the law-making processes in international law still recognizes States as the only legitimate lawmakers, some theories of law also accept that the law itself can come into being through the participation of non-State actors.\(^7\) One example in space law is the highly influential role played by commercial and private entities as ‘sector members’ of the International Telecommunications Union (ITU), where regulations are made regarding the registration and protection of orbital slots and radio frequencies.\(^8\) Some would argue that the influence of non-State actors on the content of the regulations is evidence of the fact that international law can be formed beyond the strict limits of State will. Conversely,

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3 Article 2(7) of the Charter provides:

Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter …

4 Crawford, supra note 2 at 20.

5 Ibid. at 13.


8 See Article 3(3) Constitution of the International Telecommunication Union, 22 December 1992, 1825 UNTS 331 [ITU Constitution].
others would contend that the role of private entities is merely influential, and that the regulations are only binding because they come into being through the Radio Regulations promulgated by the formal processes in the ITU, which was established by State will and consent.

In order to understand this dynamic properly, the traditional sources of international law will be discussed next, with reference to the kinds of space law found in these sources.

Traditional sources of international law

Article 38 of the Statute of the International Court of Justice

Although the international legal order lacks any central constitutional mechanisms, the UN Charter and the Statute of the International Court of Justice (ICJ) are both considered to be constitutive documents. They were drafted immediately following World War II when the UN was conferred certain powers in order to fulfill its primary purpose of promoting and protecting international peace and security.9 The ICJ is the “principal judicial organ” of the UN,10 and was established to offer a peaceful means of dispute resolution between States so as to avoid resorting to sanctions or the use of force.11 The ICJ Statute was primarily written as a document organizing the composition, functioning and jurisdiction of the Court, and Article 38 directs the Court as to what sources it may apply in determining the content of international law.12 Nonetheless it has come to represent the identification of sources of international law in general; even if it was not intended to “codify” such sources,13 it is generally seen as the authoritative list of formal sources of binding law.14

Article 38 of the ICJ Statute provides:

1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:
   a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting States;
   b. international custom, as evidence of a general practice accepted as law;
   c. the general principles of law recognized by civilized nations;
   d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.

9  Art 1 UN Charter, 1945.
10 Art 1 Statute of the International Court of Justice, 1945.
11 Ibid., Art 36(3).
12 ICJ Statute, supra note 10, art 38.
13 Crawford, supra note 2 at 22. Article 38 was based on the almost identical article found in the statute of the predecessor of the ICJ, the Permanent Court of International Justice (PCIJ), which had been established by the League of Nations, but was disbanded with the coming of the World War II. See Shabtai Rosenne, “International Court of Justice” in Max Planck Encyclopedia of Public International Law, MPEPIL 34 (Oxford University Press, 2006) at 1.
14 While this is the standard view, not all scholars agree that it is an exhaustive list, especially given the increasingly active role of non-State actors on the international plane, and the increased complexity of relationships between them. See e.g. Boyle & Chinkin, supra note 5; Higgins, supra note 6; Reisman, supra note 6; Cassandra Steer, “Non-State Actors in International Criminal Law” in Jean D’Aspremont, ed, Non-State Participants in the International Legal Order (Oxford: Routledge, 2011).
Paragraph 1 lists three primary sources, followed by two subsidiary sources under clause (d). Each of the sources listed will be discussed in turn here, with reference to their relevance for space law.

**Treaties**

Treaties are the first, and arguably ‘strongest’, source of law listed in Article 38. Agreements, conventions or protocols are all legally binding treaties, and there is no legal difference between any of these terms.\(^{15}\) The Vienna Convention on the Law of Treaties (VCLT) governs the application and working of all treaties, and it is therefore also applicable to international space law.\(^{16}\)

International space law relies heavily on its treaties.\(^{17}\) The most important treaties are the five core treaties, namely the 1967 Outer Space Treaty,\(^ {18}\) the 1968 Rescue Agreement,\(^ {19}\) the 1972 Liability Convention,\(^ {20}\) the 1974 Registration Convention,\(^ {21}\) and the 1979 Moon Agreement,\(^ {22}\) as well as the UN Charter, the 1963 Partial Test Ban Treaty,\(^ {23}\) the VCLT, and the 2010 ITU Constitution and Convention.\(^ {24}\) There are also numerous treaties which do not specifically deal with outer space, but which will come into play with respect to specific space activities, such as the treaties governing the law of armed conflict and prohibiting specific weapons, trade and investment treaties, and human rights treaties.

Treaties act as international contracts between States. They are binding because States explicitly consent to their terms.\(^ {25}\) Usually the terms and provisions of a treaty are negotiated at a convention and is then opened for signature. Often, however, the signature itself is not enough; a State must also ratify the treaty, for instance by enacting it as one of its national laws. For some treaties, although it might be signed by States at a convention, it may not come into legal force until a designated number of States have also ratified it.\(^ {26}\) This is the reason why the 1996 Comprehensive Test Ban Treaty,\(^ {27}\) which was adopted to fill the lacunae of the 1963 Partial Test Ban Treaty, has never come into force: although 159 States have ratified it, this is not

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15 Article 2(1)(a) VCLT.
17 Ram Jakhu & Steven Freeland, supra note 1 at 463.
19 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, 22 April 1968, 672 UNTS 119 [Rescue Agreement].
21 Convention on Registration of Objects Launched into Outer Space, 14 January 1975, 1023 UNTS 15 [Registration Convention].
22 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, 18 December 1979, 1363 UNTS 3 [Moon Agreement].
24 ITU Constitution, supra note 8; Convention of the International Telecommunication Union, 22 December 1992, 1825 UNTS 390 [ITU Convention].
25 Article 11 VCLT.
26 Articles 2(1)(b) and 14 VCLT.
enough according to the terms of the 1996 Treaty. On the other hand, as soon as a State has signed a treaty, even if it has not ratified it, the State is still obliged to refrain from acts that would defeat the object and the purpose of the treaty. This is often seen as an extension of the rule known as *pacta sunt servanda*, i.e. every State which is bound by a treaty must perform its obligations in good faith. Such good faith must apply from the moment of signature, since this is an international signal of the will of the State to become bound.

A treaty may never bind a third State without its consent. For this reason, the Liability Convention is only applicable to the 100 States that are parties to it, and the Moon Agreement is considered to be only marginally successful, since only 16 States have become parties, with a further four signatories which have not yet ratified it.

If the terms of a treaty allow it, an international organization – for example the UN, the European Union or the African Union – may also sign a treaty. None of the five space law treaties allows this, however the Liability Convention and the Registration Convention may apply to international organizations if they accept the terms of these treaties by declaration.

The European Space Agency (ESA) and EUTELSAT have made such declarations with respect to the Liability Convention, and the ESA, EUTELSAT, and EUMETSAT have made declarations with respect to the Registration Convention.

If a State acts in breach of a treaty provision, any other State that is injured by this may demand cessation of the activities, as well as an apology or reparation. If the injurious State fails to respond, the injured State may bring a case before the ICJ. Under Article VI of the Outer Space Treaty, a State is responsible for all national space activities taking place under its jurisdiction. This means that even if a commercial entity acts in breach of a treaty, the State of registry of that entity can be held responsible for that breach. Most of the obligations under the five space treaties can also be considered obligations *erga omnes*, i.e. obligations towards the international community as a whole. In the case of breach of such obligations, any State that is a party to the treaty may bring a claim, without having to prove injury. This may be particularly important in the future as commercial and private entities begin to increase their activities, such as mining asteroids or creating space habitats, where there may be risks of breaching some of the fundamental principles of the Outer Space Treaty.

29 Article 18 VCLT.
30 Article 26 VCLT. This is also recognized as a general principle that pre-existed the VCLT.
31 The *pacta tertiis* rule, Article 34 VCLT.
32 *Status of International Agreements Relating To Activities In Outer Space As At 1 January 2015*, A/AC.105/2015/CRP.8, online: www.unoosa.org/oosa/en/SpaceLaw/treatystatus/index.html.
33 Article XXII section 1, 1972 Convention on International Liability for Damage Caused by Space Objects (Liability Convention); Article VII, 1974 Convention on Registration of Objects Launched into Outer Space (Registration Convention).
34 Francis Lyall & Paul B Larsen, *Space Law: A Treatise* (Ashgate, 2009) at 106. See also *Status of International Agreements Relating To Activities In Outer Space As At 1 January 2015*, supra note 37.
36 Article 42 (b) ILC Articles on State Responsibility.
**Customary law**

The second source listed in Article 38 of the ICJ Statute is that of international custom, “as evidence of a general practice accepted as law”. There are two elements to customary law: there must be evidence of State practice (the objective element), and this practice must be “accepted as law” (the subjective element). This second element is also known as the requirement of *opinio juris*: a State behaving in a certain way must do so according to a belief that it is bound by law to follow that behavior, before this can be recognized as customary law rather than just a habit or tradition. This subjective element is difficult to prove, since it refers to the “belief” held by an abstract entity, the State. However it is possible to resort to statements made by those representing the State in diplomatic matters or internal political representation. If there is a significant number of States disagreeing with or objecting to such a norm, then it cannot be recognized as custom due to lack of sufficient *opinio juris*.

There is general agreement that many of the principles contained in the Outer Space Treaty are also customary in nature, since they hail from the 1963 UN Declaration of Legal Principles Governing Activities of States in the Exploration and Use of Outer Space (Space Principles Declaration), and these principles themselves have been recognized as customary law. This is not to say that all UN General Assembly resolutions are customary law. These resolutions are not binding and while a resolution may be a reflection of the aspirations and political stances of the countries that vote in favor of it, that is not a reflection of *opinio juris*. More will be said about this below in the section on soft law.

Since many principles of the Outer Space Treaty are considered binding as a matter of customary law, they are also binding on States that have not signed or ratified the Treaty. Whereas treaties are binding in a contractual sense only on States which have signed them, customary law has a broader reach, since it comes into being as a slow process of acquiescence and agreement among all States over time with respect to a specific norm.

One example of customary law in space activities is the emergence of a right of passage into outer space, or the norm that it is acceptable to traverse through the airspace of another State when launching an object into space, without first seeking permission from that State. In the earliest years of space launches, this was the practice that emerged, and it has continued even as the number of States launching and the number of launches per year have continued to increase. Because customary law usually takes a long time to crystallize, it may be questionable as to whether such a form of “instant custom” is entirely legitimate, but the fact that there are no objections may support the claim that this is a recognized right.

The only way for a State to escape the binding nature of a particular norm under customary law is to take an explicit position as a “persistent objector”. For instance, the ICJ determined that there was a customary 10-mile rule with respect to marine bays, but that this was not binding on Norway, since it had consistently and publicly objected to this norm, and thus had

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37 North Sea Continental Shelf (Federal Republic of Germany/Netherlands), 20 February 1969.
39 UN GA Res 1962 (XVIII).
40 Lyal & Larsen, *supra* note 24 at 48.
42 Lachs, *supra* note 31 at 126. See also the dissenting opinion of Judge Manfred Lachs in the Northsea Continental Shelf Case, ICJ Rep 3, 230; Lyall & Larsen, *supra* note 24 at 161.
43 A “persistent objector” is a State that consistently and persistently lets it be known, through official statements, that it does not agree with a particular rule. See Crawford, *supra* note 2 at 28.
proved itself to be a persistent objector. A single persistent objector cannot veto the emergence of a customary norm; all that the objecting State does is ensure that a specific norm does not apply to it, even while it applies to all other States. Some would argue that such objection in fact undermines opinio juris, others maintain that it allows customary norms to emerge while at the same time protecting States against majoritarian tendencies in international law-making.

**General principles**

The wording under Article 38(c) of the ICJ Statute is very much a product of its time, since it references general principles of law “recognized by civilized nations”. Clearly, to make a distinction between ‘civilized’ and ‘uncivilized’ nations today would be an anachronism. Even at the time that the Statute was drafted there were voices of dissent, since the intention was to exclude non-Western States, meaning that colonialism ruled the making of international law.

This aspect of the text can, therefore, be disregarded.

The intention of including ‘general principles’ among the sources of international law was to ensure there were no gaps where treaties or custom did not provide clear rules. However they are always by definition general in nature, and are therefore unlikely to offer clear and concrete rules of behavior, or specific rights or obligations.

The drafters of the Statute of the Permanent Court of International Justice – the predecessor to the ICJ and upon which the ICJ Statute was based – had in mind principles such as good faith. This principle is fundamental to the interpretation and application of the space treaties, and to the use and exploration of outer space in general. The underlying principles of the Outer Space Treaty, that the exploration and use of outer space must be “for the benefit and in the interests of all countries”, and that space is the province of all humankind, necessitate good faith on the part of all parties in space activities. States must also act in good faith as part of the rather broad obligation in Article IX of the Outer Space Treaty, to conduct their space activities with “due regard to the corresponding interests” of other States. If there were ever a contention between States as to whether this had in fact been fulfilled, “good faith” would be key.

The PCIJ and the ICJ have applied various other general principles in cases before them, many of which may be relevant for future disputes regarding space activities. These include:

45 Crawford, supra note 2 at 28.
47 It must be noted, however, that when ascertaining general principles, judges and authors still often fail to look beyond the dominant Western legal regimes. See e.g. B. Chimni, “Third World Approaches to International Law: A Manifesto”, 8 International Community Law Review 3 (2006).
49 Charlesworth, supra note 54 at 196.
50 Outer Space Treaty, supra note 23, art I.
51 Ram S. Jakhoo & Steven Freeland, supra note 1 at 468.
52 Outer Space Treaty, supra note 23, art IX.
fundamental principle of humanity;53 the principle that no State should knowingly allow its territory to be used by others contrary to the rights of third States;54 and the principle of self-determination.55 Other general principles of a more procedural nature applied by these courts include: the determination that an administrative tribunal makes binding decisions the same way other judicial tribunals do (res judicata);56 that if an injured State is unable to provide direct proof of the injury, indirect evidence, such as inferences from facts and circumstantial evidence, is admissible;57 and that if a party is accused of not fulfilling an obligation, this cannot be held against it where the accusing party prevented the former from doing so.58

The question is often raised whether such general principles must be of domestic or international origin.59 In the list of examples above, all of those in the first group of fundamental principles were determined to be principles of international law, whereas those in the second group of more procedural principles were all determined based on their existence in various domestic systems. While either heritage is possible, caution should be exercised before entering a comparative law analysis of domestic laws in order to extract a general principle. National jurisdictions differ due to a diversity of legal traditions, and it could be prejudicial to assert that, because a certain norm appears in a group of jurisdictions, it is “general”, when there may be many other jurisdictions which do not share the same norm.60

This is important with respect to distilling general principles from national space legislation. Although the work of the UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS) Legal Subcommittee Working Group on National Legislation has provided a very useful comparative table of domestic space legislation, finding commonalities among a relatively small group of nations does not necessarily reflect a general principle.61

Judgments and case law – a subsidiary source

Article 38(1)(d) of the ICJ Statute refers to Article 59, according to which judgments of the ICJ are only binding on the parties to the specific case, and do not have any effect of stare decisis, which is familiar in common law systems; that is, they do not bind the ICJ nor any other courts to decide the same in any future decisions. At the same time, decisions of the ICJ and of other international tribunals, such as the Permanent Court of Arbitration (PCA), are often referred to as authoritative. The ICJ is recognized de facto as authoritatively clarifying and even creating international law.62 This authority is granted due to the final clause of Article 38(1), according to which reference may be made to judicial decisions wherever treaties, custom, and general principles do not provide a clear answer. This case law is particularly important in areas of

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54 Ibid.
57 Corfu Channel Case, supra note 61 at 22.
58 Case Concerning the Factory at Chorzów [Germany v. Poland] Jurisdiction, Judgment, PCIJ Series A No. 9, ICGJ 247 (PCIJ 1927), 26th July 1927, Permanent Court of International Justice.
59 Gaja, supra note 36 at 1; Charlesworth, supra note 54 at 196.
60 Crawford, supra note 2 at 35; Charlesworth, supra note 54 at 196.
international law which have relied upon judicial decisions to explain the terms of treaties, such as human rights, the law of armed conflict, international criminal law, and international trade and investment law.

The general understanding of clause (d) is that it refers to decisions of international courts and tribunals, and not domestic courts. However, in the search for custom and general principles, the ICJ and many international criminal tribunals have sometimes looked to domestic case law. Thus the role of domestic case law may be more important than it once was. Nonetheless, it must be clarified that domestic judicial decisions on national space legislation cannot amount to a source of international law, since this legislation is only applicable within a national legal system, and will differ greatly from jurisdiction to jurisdiction. It is for this reason that domestic judicial decisions regarding national laws are also unlikely to amount to evidence of custom or a general principle.

To date, there have been no international judicial decisions regarding contentious application of the space treaties. There was a potential for this to occur when radioactive debris from the USSR Cosmos 954 satellite landed on Canadian territory, and Canada made a claim to the USSR through diplomatic notes under the Liability Convention. Ultimately, however, these two States settled out of court. Judicial decisions are therefore currently not the most influential sources in the direct development of space law. Indirectly, however, there are many judicial decisions which are of importance due to the fact that other areas of international law are applicable in space, such as environmental law, the law on the use of force, the law of armed conflict, and so on.

“The most highly regarded publicists” – a subsidiary source or something more?

Possibly the most controversial of all the formal sources of international law, is the opinion of “the most highly regarded publicists”, listed in Article 38(1)(d) as a subsidiary means for determining the law. In the French text of the ICJ Statute, the term *la doctrine* is used, which perhaps reflects the fact that doctrine is considered an important part of domestic law in the European civil law tradition, and this emanates from authoritative scholars. In the debates during the drafting of the Statute of the PCIJ, there was quite a difference of opinion as to whether this should be included. Some States considered doctrine to be recognized as a source of international law, while others considered it as a tool in determining custom. Another group insisted that the writings of scholars had no place in determining the law, arguing it would leave judges too much freedom to be politically selective of authors in order to support a given assertion.

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64 This can also be problematic in other fields of law where custom has been asserted based on domestic case law, see e.g. Cassandra Steer, “A Valid International Problem vs. A Valid International Law: Shifting Modes of Responsibility in International Criminal Law” in Marianne Hirsche Ballin et al., eds, *Shifting Responsibilities in Criminal Justice* (The Hague: Eleven International Publishing, 2011).

65 The diplomatic letter making the claim can be found in Cosmos 954 Claim (Canada v. USSR) [1979] 18 ILM 899. Stephan Hobe et al., *Cologne Commentary on Space Law: In Three Volumes. Outer Space Treaty* (Carl Heymanns Verlag, 2009) at 143.

66 See “Space Law as part of ‘general international law’”, infra.

The final compromise was to include the ambiguous wording we are left with today, without resolving this debate.\textsuperscript{68}

Some argue that together with judicial decisions the “teachings of the most highly regarded publicists” are not in fact sources unto themselves, but rather tools for clarifying the content of the law in one of the first three formal sources.\textsuperscript{69} Others consider doctrine to be a source unto itself, because it is influential in the development of certain branches of international law.\textsuperscript{70}

At the very least, the debate that has continued shows that caution must be exercised in asserting the opinions of any one scholar as authoritative. Even Judge Manfred Lachs, who is often cited as an authoritative scholarly voice in space law, himself stated:

\begin{quote}
not even of my heroes, could I say: ‘this man made law.’ For teachers are not legislators, nor lawmakers in international relations…[but] are only subsidiary means for the determination of the rules of law.\textsuperscript{71}
\end{quote}

One reason why this caution is necessary is that no scholar ever has a neutral view of the law. Authors are likely to have national biases as well as particular views on the role of law and the content that should be reflected. Since questions of international law are often highly politicized, it is difficult to avoid selective bias when citing only certain authors.\textsuperscript{72}

The question, then, is which scholars are “the most highly qualified publicists” with respect to space law? One requirement would be that a scholar is highly qualified not only in space law, but also in public international law in general.\textsuperscript{73} Another could be the building of consensus through a high frequency of reference by other scholars.\textsuperscript{74} In this respect, there appears to be consensus that Judge Manfred Lachs, Professor Bin Cheng, and Professor Carl Christol have gained this status over time.\textsuperscript{75}

\textit{Space law as part of “general international law”}

From the above discussion, it is clear that there are more sources of international space law than only the five core treaties. It is important to keep in mind that, because space law is a part of public international law, there are also many rules which apply to space activities even when space itself is not referenced. To remove any doubt on the matter, Article III of the Outer Space Treaty underlines this fact:

\begin{quote}
States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations …\textsuperscript{76}
\end{quote}

\begin{footnotes}
\item[68] See ibid. at 141; Pellet, \textit{supra} note 36 at 791.
\item[69] Jakhu & Freeland, \textit{supra} note 1 at 469; Pellet, \textit{supra} note 36 at 781.
\item[70] Peil, \textit{supra} note 56; Steer, \textit{supra} note 10.
\item[72] Crawford, \textit{supra} note 2 at 43; Charlesworth, \textit{supra} note 54 at 197; Shaw, \textit{supra} note 36 at 106.
\item[73] Jakhu & Freeland, \textit{supra} note 1 at 471.
\item[74] However this could be criticized as a self-reflexive process of reification, since the objective measure of authority is simply a measure of the frequency of subjective authority designated to an author. For a critique of this process see Steer, \textit{supra} note 10.
\item[75] Jakhu & Freeland, \textit{supra} note 1 at 471.
\item[76] \textit{Outer Space Treaty}, \textit{supra} note 23, art III.
\end{footnotes}
One consequence of this wording is that, as mentioned above, the law of treaties applies when it comes to interpreting the space treaties. This will be of particular importance as the business case for commercial entities to mine asteroids or other celestial bodies becomes more viable, since the question of their property rights over whatever they mine or extract will have to be resolved in accordance with a correct interpretation of Article II of the Outer Space Treaty, which prohibits “national appropriation by claim of sovereignty, by means of use or occupation, or by any other means”. Treaty interpretation requires first a consideration of the ordinary meaning of the words, second a consideration of the preparatory documents, or travaux preparatoires, in order to determine the intended meaning during negotiations, and finally an interpretation harmonious with the rest of the terms of the treaty. It is also not possible for a State to refer to its own internal law as justification for breach of the terms of a treaty. It would therefore not be possible for a State to legislate such that it allows commercial entities to claim property rights over celestial bodies, given that the Outer Space Treaty prohibits this. Instead, a harmonious interpretation of the treaty terms will have to be sought.

The fact that the UN Charter is mentioned specifically underlines the significance of certain provisions of the Charter, as well as the purpose of the Charter “[t]o maintain international peace and security … To develop friendly relations among nations … To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character […]” Certain provisions in particular are of interest to space activities, e.g., the prohibition of the threat or use of force under Article 2(4), the protection of sovereign equality against interference with matters which are “essentially within the domestic jurisdiction” of a State under Article 2(7), and the provision in Article 103 that, in the case of conflict between different international obligations, obligations under the Charter shall prevail.

With respect to Article 2(4), the only exception to this prohibition of the threat or use of force is that of self-defense. This can include either the right to retaliate if a State has been wrongfully attacked by another party according to Article 51, or the use of force as a form of collective self-defense, where the UN Security Council has so authorized under Article 42. These stringent international rules on the use of force, known as jus ad bellum, certainly apply in all matters of treaty application and interpretation as a matter of customary international law. Treaties can reflect or codify customary law at the time they are negotiated, but they can also come to be seen as reflective of customary law over time. See Crawford, supra note 2 at 32.

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77 Even though the VCLT came into force after the Outer Space Treaty, it is considered to be applicable in all matters of treaty application and interpretation as a matter of customary international law. Treaties can reflect or codify customary law at the time they are negotiated, but they can also come to be seen as reflective of customary law over time. See Crawford, supra note 2 at 32.
78 Outer Space Treaty, supra note 23, art II.
79 Article 31 VCLT.
80 Article 27 VCLT.
81 Article 1 Charter of the United Nations, 1945 (UN Charter).
83 See Charter, art 42.
to activities in space as well. A correlative of this is that the entire body of *jus in bello*, otherwise known as the law of armed conflict, or international humanitarian law, also applies to potential hostilities or conflicts either taking place in space, or utilizing space assets as part of a conflict on Earth. The ICJ has confirmed as much in its statement that *jus in bello* “applies to all forms of warfare and to all kinds of weapons, those of the past, those of the present and those of the future”. Beyond the UN Charter, there are other aspects of international law of importance to space activities. For instance, there are some general rules of responsibility and liability under international law which complement the rules of State responsibility under Article VI of the Outer Space Treaty and the Liability Convention. The International Law Commission, a UN body of experts mandated to codify and progressively develop international law, has developed the Draft Articles on State Responsibility, which were adopted by the UN General Assembly in 2001. States have been reticent to finalize this draft as a treaty, however it has nonetheless gained status as an authoritative instrument, as it has been cited in numerous judicial decisions and important international law treatises; in fact, in 2015 the ICJ stated that these Draft Articles have now gained the status of customary law. Similarly, there is a set of Draft Articles on Responsibility of International Organizations, and Draft Articles on Transboundary Harm, both of which may apply to space activities. Given that Article VI of the Outer Space Treaty stipulates that a State shall remain responsible for all of its national space activities, including those undertaken by non-State actors, this body of international law is highly relevant.

**Notes:**


92 *Outer Space Treaty, supra* note 23, art VI.
Another body of international law that will apply to certain space activities is that of environmental law. Although the various environmental law treaties have specific applications, such as the prohibition of trade in protected species, or the protection of the Antarctic region, there are some general principles of environmental law which must be applied. For example, the “polluter pays” principle with respect to liability, and the precautionary principle with respect to preventive measures. The latter principle determines that, when probable dangerous, irreversible, or catastrophic events are identified, but scientific evaluation of the potential damage is not sufficiently certain, the need to prevent such potential effects shall inform all decisions made or technologies implemented. This principle will become more relevant as problems of space debris increase, mining extra-terrestrial resources becomes viable, and in the case of attempting to prevent collision with a near-Earth asteroid.

Last, but not least, human rights law is also applicable to space activities. When it comes to space tourism, this body of law will become especially relevant in the near future, and even more so should humans take up residence in space stations on a more permanent basis. As well, principles such as inter-generational equity must come into play as we consider the long-term effects of our use and exploration of space.

Is there a hierarchy of sources?

With all of these various sources and bodies of international law applicable to space activities, what happens if there is disagreement as to interpretation or a clash between two competing obligations? How do we know what law applies in a given situation?

The question of hierarchy among the formal sources

It is unclear from the text of Article 38 of the ICJ Statute whether there is an intended hierarchy between the sources, other than that judgments and the writings of publicists under clause (d) are considered to be subsidiary sources. Some international lawyers believe that the ordering of the other three sources represents a hierarchy, and that in the case of a conflict between obligations, a treaty would be strongest, but customary law would be stronger than a general principle. Others do not consider there to be a hierarchy among these three sources at all. Even without such a hierarchy, it would seem that treaty obligations are likely to be more concrete in formulation, and are enforceable under the law of treaties, and are, therefore, generally stronger obligations.

93 The precautionary principle has gained an important place in international environmental law and related trade law, see 1992 Rio Declaration on Environment and Development, United Nations publication, Sales No. E.73.II.A.14; and in the 1992 United Nations Framework Convention on Climate Change. See also Article 5.7 of the World Trade Organization’s Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) of 1994.
94 Crawford, supra note 2 at 357.
96 Crawford, supra note 2 at 22; Antonio Casseese, International Law (Oxford University Press, 2004) at 198.
There are also many who assert that there is a hierarchy between bodies of law, such that human rights considerations should prevail in the development of other bodies of law.98 For instance, the UN Committee on Economic, Social and Cultural Rights has declared that the World Trade Organization must take human rights into account in enforcing trade law, and that the realms of trade, finance, and investment are in no way exempt from human rights obligations.99 The same would therefore apply to space activities, for example labor law as applicable to those working in the space industry, or other human rights applicable to commercial human space flight or to human habitation of space stations.

More generally speaking, if we apply the rules of hierarchy applicable in most domestic legal systems, a “higher” law shall prevail over a “lower” law; a more recent law shall prevail over an older law (lex posterior derogate priori); and a special rule shall prevail over a more general rule (lex specialis derogate legis generalis). Each of these rules will be discussed here.

Jus cogens – peremptory norms

The notion that a “higher” law would prevail over a “lower” one translates to a special rule of hierarchy in international law, where certain norms are considered “peremptory” or non-derogable.100 These norms are considered to be of such inherent importance that under no circumstances will any other obligation, right or norm prevail over them. The trouble is that it is unclear which norms fall under this category, since this requires “the international community of States as a whole” to agree.101 In any case, it is agreed that the prohibition of genocide has the status of jus cogens,102 as does the prohibition of torture.103

In the specific context of space activities, some have asserted that the right of free access to space, the right of innocent passage through the airspace of another State to reach outer space, and the principle of “province of all humankind” are all jus cogens norms.104 Yet even if they are deserving of this status, the mere desire to have these rights enshrined as non-derogable is not

100 These have been given a special place also in the law of treaties, under Article 53 VCLT.
101 Shelton, supra note 82 at 300. See also Article 53 VCLT.
103 Erika De Wet, “The Prohibition of Torture as an International Norm of jus cogens and its Implications for National and Customary Law” (2004) 15:1 European Journal of International Law 97 See also Prosecutor v. Furundzija, IT-95-17/1-T10 (Dec. 10, 1998), available at www.un.org/icty. It can never be justifiable under any circumstance to torture individuals. The fact that torture still occurs on a disturbing scale, and often at the hands of State agents, is a problem of enforcement, and should not be confused with the normativity of the rule. There are no States that would argue that torture is lawful; they would rather argue that what they are doing is not torture.
sufficient to raise them to this rank. *Jus cogens* norms form slowly over time with agreement from the majority of States, and can be confirmed in case law. It is difficult to see that these rights have yet gained such an elevated and protected status.

**Art 103 of the UN Charter**

Another special rule of hierarchy in international law is that of Article 103 of the UN Charter, mentioned above. According to this provision, in the case of a conflict between an obligation under any other source of law and an obligation under the Charter, the Charter shall prevail.\(^{105}\) This gives special authority to the binding resolutions of the Security Council, which amount to a Charter obligation, and which can authorize the breach of any other obligation, for example, a trade embargo, in the name of peace and security.\(^{106}\)

This raises interesting questions with respect to the registration by the UN Office of Outer Space Affairs of launches made by the Democratic People’s Republic of Korea (DPRK) recently.\(^{107}\) Given that the UN Security Council has adopted resolutions placing an embargo on arms and anti-ballistic missile technology against the DPRK,\(^{108}\) some States have raised concerns that these launches are in violation of the resolutions and, thus, that their registration as lawful launches by a UN body is also a violation of these resolutions.\(^{109}\)

**The lex specialis and lex posterior rules**

Finally, the rule that a special norm prevails over a more general norm also applies in international law.\(^{110}\) This rule may go hand in hand with the *lex posterior* rule in interpreting the apparent dissonance between Article III of the Outer Space Treaty, which uses the language of absolute liability,\(^{111}\) and the Liability Convention, which distinguishes between absolute and fault-based liability.\(^{112}\) The Liability Convention should prevail both because it is the more recent, and because it is the more specific. The Liability Convention was negotiated in order to fill out the general terms of Article VII of the earlier Outer Space Treaty.

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\(^{105}\) The only exception to this is, of course, a norm of *jus cogens* which would also trump a Security Council Resolution. However it is difficult to imagine a scenario in which the Security Council would authorizing something as egregious as torture or genocide.

\(^{106}\) Article 25 of the UN Charter determines that decisions of the UN Security Council may be binding, and Article 41 mandates the Security Council to decide what measures other than use of force are to be implemented in the case of a threat to international peace and security.

\(^{107}\) UN COPUOS Report of the Legal Subcommittee on its fifty-fourth session, A/AC.105/1090 (30 April 2015) at para 71. For earlier similar controversies see e.g. Henry Hertzfeld and Shouping Li, “Registration of the 12 December 2012 satellite launch by North Korea: Should UNOOSA have accepted it?” Space Policy 29 (2013) at 93–94; Jeffrey Lewis, “Is North Korea Gearing Up for more Launches?” 38 North, 2 June 2015, online: http://38north.org/2015/06/jlewis060215/.


\(^{111}\) See *Outer Space Treaty, supra* note 23, art III.

\(^{112}\) See *Liability Convention, supra* note 25, art II, which determines absolute liability for damage caused on the surface of the Earth or to an aircraft in flight; and art III, which determines fault liability for damage caused “elsewhere than on the surface of the Earth” to spacecraft.
Similarly, it could be said that the law of armed conflict – both in treaty form and the norms accepted as part of customary law – shall apply to any conflict that takes place in outer space, or on Earth with the use of space assets, and shall prevail as a matter of *lex specialis* in the case of inconsistency with the space treaties. The law of armed conflict has been developed over a long period of time, and while there may be the need to consider its specific application to space activities, it regulates armed conflict no matter where it takes place.113

“Non-traditional” modes of regulation

With respect to sources of international law, it can be argued that there is a division among scholars: some view international law as a body of rules, while others view it as a series of processes that lead to the formation of norms.114 The first group, which can be termed formalist, generally regards the formal sources discussed thus far as the only valid sources, and tends to place emphasis on the role of States and State consent in the formation of binding rules. The latter group is more interested in the role of multiple international actors in the numerous processes that lead to the formation of norms, not only according to the formal sources, but also in various fora of international engagement. Both of these groups of scholars will generally agree that there is such a thing as “soft law”, to be discussed below; however they will place different emphasis on the value of these processes and instruments, and will explain their presence in different ways. This difference in perception can be recognized in the commentaries on space law, and it may be helpful in understanding the mistake made by some space lawyers in asserting that everything which purports to regulate space activities can be considered law.

One thing on which most scholars will agree is that Article 38 of the ICJ Statute is dated and does not reflect the interrelationship between the formal sources that it lists. Critics of the formalist school of thought will go further and contend that it is not reflective of the true processes that lead to the formation of norms either as binding law or in other non-binding forms.115

Likewise, there is a political critique with respect to the formal doctrine of sources: the underlying assumption of this doctrine is that the formation of customary law and the identification of general principles is based on an equality of States, but this ignores the inequalities of power that exist.116 The State practice and *opinio juris* necessary to evidence customary law tend to favor the most powerful States and their assertions. As well, new States and developing States have a less influential voice in the negotiation of treaties, such as the five core space treaties, and in the norms which emerge from the UN General Assembly or as binding resolutions from the UN Security Council.117


116 Brownlie, *supra* note 35 at 33.

Regardless of which school of thought one follows, it is undeniable that as international institutions have gained a more influential role in recent decades, the traditional, formal sources of law have been supplemented by some important non-traditional modes of regulation. In space law, this is an area of increasing importance. The difference between the two main schools of thought lies in the acceptance of soft-law norms as sufficient and important contributions to the law (process-oriented), or as merely supplemental and insufficient to be recognized as law (formalist).

“Soft law” in international law

The notion of “soft law” can be confusing as it can be used in different ways. Some refer to weak obligations in otherwise binding, formal sources as “soft law”. One example might be the obligation in Article IX to “conduct all activities in outer space … With due regard to the corresponding interests of all other States Parties to the Treaty”.118 What exactly is entailed in giving due regard to the interests of other States is unclear, and it may be difficult to prove the claim that a State has failed to fulfill this duty. Hence, while the obligation is binding, it is weak. Another example would be the obligation under Article VI of the 1968 Non-Proliferation Treaty on State parties “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date […] and on a treaty on general and complete disarmament”.119 The obligation to “pursue negotiations” is one of effort and not of result, since there is no obligation to in fact finalize or to sign a treaty on disarmament, nor to actually disarm by any date. However, such soft obligations are still found in a formal, binding source of law, namely a treaty.

In this handbook the broader and more accepted meaning of “soft law” will be maintained, namely a non-binding instrument that does not fit into one of the formally binding sources discussed above. The contents may include principles, guidelines, aspirational statements or statements of policy agreement. They are something more than merely political arrangements in which there is no precision, yet something less than binding agreements.120 For example, the long-term sustainability of the use and exploration of space has become a focus of UNCOPUOS, with general guidelines being the outcome rather than a binding treaty.121 Some commentators regret the fact that no new space treaties have been negotiated since the 1970s, especially given concerns for space debris and the increased role of commercial and private space actors in general. Because soft-law instruments are not binding, they are not enforceable. Nevertheless, it could be said that they provide incentives in other ways for international actors to modify their behavior, since they represent political agreements and signal requirements of good faith.122 Sometimes they may even be more effective in reaching a

118 Outer Space Treaty, supra note 23, art IX.
119 Treaty on the Non-Proliferation of Nuclear Weapons, 1 July 1968, 729 UNTS 169, art VI [Non-Proliferation Treaty].
121 Proposal by the Chair of the Working Group on the Long-term Sustainability of Outer Space Activities for the consolidation of the set of draft guidelines on the long-term sustainability of outer space activities, A/AC.105/2014/CRP.5 (3 June 2014), online: www.unoosa.org/oosa/en/ COPUOS/stsc/ac105-c1-ltd.html
particular goal with respect to regulating behavior than the slow and politically charged process of negotiating a new treaty.

One example of this is the fact that the consensus-based UNCOPUOS has been politically deadlocked for years on the question whether to pursue treaties on restraining an arms race in space, since some States insist that the Committee is not the venue to discuss military or non-peaceful uses of space. At the same time, the Conference on Disarmament (CD), which would otherwise be the suitable UN body to take up such a task, has also been politically deadlocked on this question.123 Although China and the Russian Federation have proposed a draft treaty on Prevention of Placement of Weapons in Outer Space (PPWT) before the CD, its further negotiation has not received full support.124 Concurrently, there have been parallel proposals for a non-binding International Code of Conduct, which received broader international support to begin with, but was recently stymied during meetings in New York in 2015. The intention was to incentivize States to conduct themselves in a similar way as the PPWT aims to achieve. The risk of attempting to negotiate a new treaty is that States can sometimes negotiate to weaken the core provisions in a treaty draft, in order to protect themselves against binding obligations that they feel are restrictive, leaving a binding instrument empty of its original intention. Furthermore, States may sign but not ratify a treaty, preventing it from coming into force.

**General Assembly resolutions as soft law**

Space law started out as soft law: the first statement produced by the international community was the 1963 UN General Assembly Space Principles Declaration. General Assembly resolutions can be considered to be soft law since they are statements adopted by vote to express international governmental opinion on specific matters, and often contain aspirational calls to action. However, they have no binding force. According to the UN Charter, the General Assembly may only make “recommendations”, whereas the Security Council may make binding resolutions.125

General Assembly resolutions may still have normative value. As Sir Robert Jennings asserted, “recommendations may not make law, but you would hesitate to advise a government that it may, therefore, ignore them, even in a legal argument”.126 General Assembly resolutions

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125 Articles 10 and 11 of the UN Charter mandate the General Assembly to make recommendations on matters within the scope of the Charter; Article 25 determines that States are bound by decisions of the Security Council.

126 Robert Yewdall Jennings & John R. Spencer, *What is International Law and How Do We Tell It When We See It?* (Kluwer Law Intl, 1983) at 14 cited in; Steven Freeland, *supra* note 101 at 28.
are adopted by vote, and the vote count can demonstrate the degree to which there is international agreement on a certain matter. When they are adopted without abstentions or dissenting votes, this consensus can have a very strong normative value.

The General Assembly has adopted a series of resolutions of direct importance to space law:

- the 1982 Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting;\(^{128}\)
- the 1986 Principles Relating to Remote Sensing of Earth from Outer Space;\(^{129}\)
- the 1992 Principles Relevant to the Use of Nuclear Power Sources in Outer Space;\(^{130}\) and
- the 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.\(^{131}\)

Of these, the resolution on Direct Television Broadcasting was the only one not adopted by consensus, since many States which did not yet have such technology disagreed as to the freedom to broadcast into other States.\(^{132}\) The Benefit Principles are the most recent, but contain the weakest normative value due to the broad language used in the text, which essentially seeks to expand on Articles I and II of the Outer Space Treaty. The resolution was adopted as a compromise between enabling space-faring nations to progress in their activities while also expressing the concerns of developing nations who wanted to ensure they gained benefits from these activities, and to protect their own future potential space activities.\(^{133}\)

On the other hand, the principles on Remote Sensing have since been recognized as reflective of customary law, and have thus gained a stronger, binding force in international law.\(^{134}\) The “norm-creating” language of these principles is an essential part of contributing to this status, since mandatory language can create obligations and rights, whereas the more broad language used in the Benefit Principles does not have this effect.\(^{135}\) In some cases General Assembly resolutions may be indicative of emerging customary law as they may express evidence of *opinio juris*, as the ICJ itself has stated.\(^{136}\) However, once again, caution should be exercised: this does not mean that all General Assembly resolutions reflect customary law, nor that resolutions are themselves a source of customary law. Rather they can provide evidence of

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127 UN Charter Article 18. See also Thurer *supra* note 132 at para 11.
129 UNGA Res 41/65, 3 December 1986.
135 Jahu & Freeland, *supra* note 1 at 475.
the opinion of States, especially if they are adopted unanimously. But customary law also requires State practice, so the resolutions alone are not enough.137

**Standards and guidelines**

International norm-creation as soft law can take place in many different international fora. One example is the Inter-Agency Space Debris Coordination Committee (IADC), which was established in 1993 and reports to the UNCOPOUOS Scientific and Technical Subcommittee.138 The IADC does not have any formal law-making capacity. Nevertheless, in 2001, UNCOPOUOS asked the IADC to develop a set of space debris mitigation guidelines.139 UNCOPOUOS used these as a basis for its 2007 Guidelines, which were later adopted by the UN General Assembly.140 The Guidelines are a voluntary measure which encourage States to implement their own national standards dealing with launch and satellite design (to reduce long-term debris), and space safety (to deal with current debris).

The IADC based its original draft guidelines on the prior work of the International Standards Organization (ISO), an independent, non-governmental organization that has representatives from standardization bodies of 163 States.141 In turn, the ISO works closely with the International Association for the Advancement of Space Safety (IAASS), a non-profit organization “dedicated to furthering international cooperation and scientific advancement in the field of space systems safety”,142 which has observer status at UNCOPOUOS. Together these non-governmental organizations can contribute from industry and technical perspectives to the development of soft-law standards and guidelines, which may then be implemented into national space legislation.

**Transparency and confidence building measures**

There has been a push over recent years to develop soft-law mechanisms in the apparent absence of State will to negotiate binding treaties, particularly with respect to arms control. In 2006 and 2007 the UN General Assembly adopted resolutions on “Transparency and Confidence Building Measures”, or TCBMs, stating the need for States and international organizations to create measures that would aid transparency and verification.143 TCBMs can take many forms, and are sometimes adopted as standalone actions and sometimes in combination with other instruments. In 2007 the UN Secretary General made a request for concrete proposals, and in response to this, the EU drafted a proposed Code of

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137 An illustration of this, and of the generally weak normative effect of General Assembly resolutions, are the PAROS resolutions (Prevention of an Arms Race in Outer Space), adopted every year for more than 15 years with almost identical wording and with near unanimity, that have had little effect on the behavior of States and have never been cited as creating an obligation or a customary norm. See Jakhu & Freeland, supra note 1 at 475.
138 www.iadc-online.org/.
141 www.iso.org/iso/home/about/iso_members.htm.
142 http://iaass.space-safety.org/.
143 UN General Assembly Resolution 61/75 (2006), and 62/43 (2007). While TCBMs are aimed at arms control in general, they have begun to play an important part in space arms control in particular, and have featured prominently in discussions before the CD. See Ram S. Jakhu, “Transparency and Confidence Building Measures for Space Security” in: Ajay Lele (ed), Decoding the International Code of Conduct for Outer Space Activities (Pentagon Security International, 2012) at 35.
Conduct in 2008. Following criticisms that the process had not been sufficiently transparent and inclusive, the EU held three rounds of multilateral Open-ended Consultations, which led to the 2014 draft International Code of Conduct (ICoC). While this soft-law instrument originally had broad international support, many African and Latin American countries object to the emphasis on a right to self-defense, and feel that accepting a Code could restrict their future space activities. At the recent multilateral negotiations held at the UN Headquarters, the ICoC suffered a major setback as criticisms were repeated that the process was questionable and the text was not representative. In the end no final agreement was reached, and the future of this instrument remains to be seen.

A parallel response to the call for TCBMs has been a joint proposal by China and Russia to develop a binding treaty, the abovementioned PPWT. This proposal has received much criticism from States who do not wish to subject themselves to binding norms, and which would prefer to suffice with the ICoC, in particular from major space-faring nations such as France and the US. Thus, while it may be possible to conceive of TCBMs as a combination

146 Rajeswari Pillai Rajagopalan and Daniel A. Porras, “EU Courts Support for Space Code of Conduct”, Space News (14 July 2014): http://spacenews.com/41254eu-courts-support-for-space-code-of-conduct/. At the same time the ICoC has received strong support from many countries, see http://reachingcriticalwill.org/resources/fact-sheets/critical-issues/5448-outter-space#CoC.
147 For the agenda and discussion documents, see http://eu-un.europa.eu/articles/en/article_16615_en.htm.
of hard and soft law, it would seem that, for the moment, the soft-law alternatives may be more successful in creating the kinds of norms necessary for space security.

In this regard, in 2014 the General Assembly adopted a resolution on “No First Placement of Weapons in Outer Space” by consensus.150 While this resolution expresses support for the proposal to negotiate a PPWT, its more immediate normative force is that it urges all States to adopt a political commitment that they will not be the first to place arms in outer space. At the time of writing, 11 States have made declarations: Argentina, Armenia, Belarus, Brazil, Cuba, Indonesia, Kazakhstan, Kyrgyzstan, Russia, Sri Lanka, and Tajikistan.151 Notably among these, Russia is the only truly active space-faring nation.

Conclusion

The most important thing to understand about international space law and law-making processes is that these are embedded in public international law as a whole. Thus, the formal sources of international law apply to space law, and these are supplemented by the increasing importance of soft-law mechanisms. In some aspects of space activities, it seems that some States have reached the limit of their will to negotiate formally binding treaties. Nonetheless, this does not mean that space law has come to a halt, or that there is no law that applies. Instead, people interested in space law must first look to the wider body of international law for answers, and may also look to soft-law mechanisms for guiding norms.

The question as to the weight of those soft-law norms may depend on whether one takes the view that international law is a formal body of rules, or that it is rather a process of norm-creation involving multiple actors. The main difference between these views is that a formalist sees soft-law mechanisms as entirely subsidiary to formal law, whereas a process-oriented view may regard soft law as sufficient for international regulation. With respect to space activities, both schools of thought must recognize that as technology develops and our space activities proliferate, the role of soft law mechanisms as supplemental to the formal sources will become increasingly important.

150 A/Res/69/85, 2 December 2014.