

# **Principles of Peaceful Purposes and the Obligation to Undertake Appropriate International Consultations in Accordance with Article IX of the Outer Space Treaty**

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“[Article IX is a] very salutary provision, and one highly desirable in connection with the peaceful uses of outer space”<sup>2</sup>

-U.S. Ambassador Goldberg (during the 1967 Senate Foreign Relations Committee Hearing on the Treaty on Outer Space)

## **Introduction**

Recently the question of Article IX of the Outer Space Treaty and in particular the nature of its obligation for States to undertake appropriate international consultations has been the subject of considerable discourse. In large part flowing from recent ASAT activities, but also deriving from foresight on the increasing importance of this provision due to a combination of proliferating space actors and a growing diversity in the number and nature of planned activities and experiments in outer space.

Two years ago I wrote an article examining the FY-1C and USA-193 ASAT activities in light of Article IX. The culmination of my research was published in the *Journal of Space Law*.<sup>3</sup> In that article, I undertook a jurisprudential historical study of Article IX, examining its political and technical origins. I also undertook a legal analysis of Article IX obligations. This paper builds upon my earlier research, delving deeper into the nexus between Article IX general principles and the obligation and right of appropriate international consultations, examining the international legal and political ramifications of States Party breaching their obligation to consult, and forecasting future application of the consultation provisions in light of maintaining international peace and security. Reference will be made to my previous publication in the *Journal of Space Law* to explain the conditions that trigger the Article IX legal obligation to consult and to define appropriate international consultations.

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<sup>2</sup> “Treaty on Outer Space”, *Hearings before the Committee on Foreign Relations, United States Senate, 90<sup>th</sup> Congress, 1<sup>st</sup> Session, March 7, 13, & April 12, 1967* (Government Printing Office: Washington D.C., 1967) at 42.

<sup>3</sup> Michael Mineiro, “FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty” 34(2) *Journal of Space Law* 321 (2008).

## Contextualizing the Treaty

The *Outer Space Treaty* is an international agreement that is primarily a codification of principles to guide State action.<sup>4</sup> Within the text of the Treaty these guiding principles are elaborated to varying degrees, sometimes articulating specific legal rights and obligations that can be called upon by State Parties for legal and/or political purposes. Article IX is an embodiment of this duality. On the one hand Article IX states broadly guiding principles, but on the other hand references particular rights and obligations. To properly understand Article IX, its obligations and rights must be placed within the context of their guiding principles. The three guiding principles of Article IX are the principles of (a) Cooperation, (b) Mutual Assistance, and (c) Due Regard.

### Principle of Cooperation

The first part of Article IX states, in part: “In the exploration and use of outer space, including the moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of cooperation and mutual assistance...”

Cooperation has not been legally defined by an international treaty nor a ruling of the International Court of Justice. The *U.N. Charter* holds as one of its purposes “the achievement of international cooperation in solving problems of an international character.”<sup>5</sup> The *1970 Declaration of Friendly Relations* declares that States have “a duty to cooperate with one another to maintain international peace and security, to promote economic stability and progress, and the general welfare of nations.”<sup>6</sup> The Article III of the *Outer Space Treaty* states that States shall carry on their activities “in the interest of promoting international cooperation and understanding.”<sup>7</sup>

While there is no consensus on the legal definition of cooperation, an analysis of the *1970 Friendly Declaration* “demonstrates that the term describes the voluntary coordinated action of

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<sup>4</sup> The very title of the treaty is illustrate to this point, *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies*, 18 UST 2410 (hereafter referred to as the “Outer Space Treaty”). However, it is important to note that complimentary to these general principles, the Outer Space Treaty also incorporates outer space arms control and transparency mechanism such as Articles IV, X, XI, & XII.

<sup>5</sup> Art.1(3), *U.N. Charter*

<sup>6</sup> G.A. Res 2625 (XXV), *Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations* (24 October 1970).

<sup>7</sup> Art. III, *Outer Space Treaty*. **Consider also**, Articles X, XI, and XII of the *Outer Space Treaty* provide specific methods for States Party to promote international cooperation in the peaceful exploration and use of outer space through transparency mechanisms. Article X provides for States Party to consider requests from other States Party to observe the flight of space objects launched. Article XI establishes the obligation to inform the international community, to greatest extent feasible and practical, of the nature, conduct, locations and results of space activities. Article XII establishes the right of visits of States Party representatives on all stations, installations, equipment and space vehicles on the moon and other celestial bodies, on a basis of reciprocity.

two or more States which takes place under a legal regime and serves a specific objective. To this extent it marks the effort of States to accomplish an object by joint action, where the activity of a single State cannot achieve the same result.”<sup>8</sup>

### **Principle of Mutual Assistance**

The principle of mutual assistance derives from a customary practice in maritime tradition<sup>9</sup> to “render assistance,” a practice that has been codified in the law of the sea.<sup>10</sup> This customary practice arose out of humanitarian and enlightened self-interest, eventually achieving domestic and thereafter international legal status.<sup>11</sup> International space law governing the rescue and return of astronauts is an example of the principle of mutual assistance further elaborated as a specific legal right and obligation.<sup>12</sup>

### **The Principle of Due Regard**

The first sentence of Article IX continues, stating that: “[States Party] shall conduct all their activities in outer space, including the moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.”<sup>13</sup>

Like the term ‘cooperation,’ ‘due regard’ has no particular definition under international law. A review of the ordinary usage of the “due (sb.)” includes “that to which one has a legal or moral right.” The ordinary usage of “regard (sb.)” includes “observant attention or heed bestowed upon or given to a matter.” Read together, the term due regard, in the context of Article IX, should be understood as an obligation to *take into account, both prior to (planned) and during (ongoing) space activities and experiments the legal rights of other States Party in the peaceful use and exploration of outer space, the moon and other celestial bodies* .

The rationale for including the principle of due regard in the *Outer Space Treaty* stems first and foremost from the practicality of States Party undertaking activities and experiments in

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<sup>8</sup> Rudiger Wolfrum, “International Law of Development” in *Encyclopedia of International Law Vol. II*, Rudolph Bernhardt Ed. (Amsterdam: Max Plank Institute of Comparative Law, 1992-2001).

<sup>9</sup> See Sophie Cacciaguidi-Fahy, “The Law of the Sea and Human Rights” 1 (9) *Panoptica 1* (2007) at 2-3. “The obligation of rendering assistance to those in peril or lost at sea is one of the oldest and most deep-rooted maritime traditions.”

<sup>10</sup> See Art. 98 of *The Law of the Sea Convention of 1982* (duty to render assistance). See also Annex to the *International Convention on Maritime Search and Rescue 1979* (SAR); and the *International Convention for the Safety of Life at Sea 1974* (SOLAS).

<sup>11</sup> Sophie Cacciaguidi-Fahy, “The Law of the Sea and Human Rights” 1 (9) *Panoptica 1* (2007) at 4.

<sup>12</sup> See Art. V, *Outer Space Treaty*. See also, *Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Space Objects launched into Outer Space*, 19 UST 7570.

<sup>13</sup> Art. IX, *Outer Space Treaty*.

a shared global common analogous to the high seas and/or international airspace.<sup>14</sup> Outer space is a shared common in which all States have the right to access and use. The failure a State to give due regard to the rights and interests of other States has the potential to result in harmful interference with other States space activities.

The application of due regard is not granted *carte blanche* to all of the interests of other States Party. Instead, due regard is limited to the corresponding interests of other States Party in their peaceful use and exploration of outer space. Indeed, ‘corresponding’ suggests that States, in their peaceful use and exploration of outer space, must have regard to other States’ rights to conduct peacefully use and exploration, but that the obligation of ‘due regard’ extends no further than that (i.e. States can disregard any anticipated impact on rights that do not correspond to peaceful use and exploration). Article IX supplements this general obligation to corresponding interests with three particular *proscriptive* legal obligations that further elucidate the interests that must be granted due regard. First, studies and exploration are to be conducted so as to avoid harmful contamination of outer space. Second, studies and exploration are to be conducted so as to avoid adverse changes in the environment of Earth from the introduction of extraterrestrial matter. Third, appropriate international consultations shall be undertaken before proceeding with any activity or experiment that a State has reason to believe would cause potentially harmful interference with activities of other States in the peaceful exploration and use of outer space.

### **Affirmative Duty to Consult**

Article IX binds States Party to an affirmative duty “to undertaken appropriate international consultations” before proceeding with any “activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies” that the State Party “has reason to believe...would cause potentially harmful interference.”<sup>15</sup>

There are three conditions for this affirmative duty to be triggered:

*1<sup>st</sup>*: There must be a **planned activity or experiment in outer space**, [Jurisdictional/Physical Element Factor]

*2<sup>nd</sup>*: There must be **reason to believe** that a planned activity or experiment **would cause potentially harmful interference**, and [Evidentiary Factor, Causality, and a Fault Element]

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<sup>14</sup> The rationale of due regard in outer space can be reasonably linked to the maritime necessity of preventing collisions at sea, derived from the analogous nature of maritime and space navigation, as well as the legal status of the high seas and outer space as international commons. See D. Greenberg & A. Millbrook Eds., “Due Regard” in *Stroud’s Judicial Dictionary of Words and Phrases* (London: Sweet & Maxwell, 2000). “Due regard to all danger of navigation and collision” in Art.27 of the Regulations for Preventing Collisions at Sea 1910: see The AGOL [1918] P.7. See Art. 3(d), *Chicago Convention*. See also, Art. 56(2) & 58(3), *Law of the Sea Convention of 1982*. See also Annex 12 to the *Convention on International Civil Aviation of 1944* (also known as the Chicago Convention).

<sup>15</sup> Art. IX, *Outer Space Treaty*.

3<sup>rd</sup>: with **activities of other States Parties** in the peaceful exploration and use of outer space. [**Specific Damage and Affected Party**]

### **1<sup>st</sup> Condition: Planned Activity or Experiment in Outer Space**

*The terms “activity,” “experiment,” “outer space,” and “planned” are not defined by the Treaty. The term activity is more encompassing than experiment, as an experiment is only one type of activity that can be undertaken. Thus, except for actions excluded from the scope of Article IX by pre-emptive norms of international law, the term activity can be reasonably interpreted as any action. Outer space is not defined under international law and some dispute may arise as to whether the spatial location of an activity is occurring within outer space or airspace. [43] Also, there is a question as to whether or not an activity or experiment that is terrestrial based is also within the scope of the term “in outer space.” For example, is an ASAT experiment that targets ground based satellite uplinks to disrupt the operation of orbiting satellites an experiment that is occurring in outer space or is it simply a terrestrial experiment that impacts an object in outer space?*

*“Planning” for something incorporates an element of premeditation and intent. An unplanned activity or experiment in outer space is possible, although highly unlikely. [44] If an unplanned activity or experiment did occur, the international consultation clause would not apply. This is a reasonable interpretation because international consultations are required before proceeding with an activity or experiment and one cannot undertake consultations for an activity or experiment they did not plan or intend to conduct.<sup>16</sup>*

### **2<sup>nd</sup> Condition: Reason to believe that a planned activity or experiment would cause potentially harmful interference**

*The terms “has reason to believe,” “would cause,” “potentially,” and “harmful interference” are also not defined in the Treaty. “Reason to believe,” when read in conjunction with “would cause potentially harmful interference,” is indicative of a burden of proof threshold. Reason to believe is not synonymous with certainty and one can exclude certainty of potentially harmful interference as the appropriate interpretation of this provision. “To believe,” in this context, is related to holding an opinion or thought. [45] “Reason,” when read in conjunction with “to believe” is*

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<sup>16</sup> Michael Mineiro, “FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty” 34(2) *Journal of Space Law* 321 (2008) at 335-336.

*commonly understood to be a statement of some fact employed to prove or disprove some assertion, idea, or belief. [46] Therefore, reason to believe should be interpreted as having knowledge that proves the assertion that a planned activity would cause potentially harmful interference.*

*This language “has reason to believe” raises interesting questions. Is this standard of “reason to believe” a subjective or objective standard? If it is subjective, how does a State determine if it has reason to believe? If it is objective, what body decides? These questions illuminate the principled nature of the Treaty and illustrate that Article IX was designed to guide and provide proscriptive general rules of conduct.*

*“Would cause” is self-explanatory to the extent that the planned activity would result in potentially harmful interference. The potentiality element of the phrase “potentially harmful interference” is abstruse. As one cannot predict with certainty the results of an action before the action is carried out, attempting to predict whether or not a space activity or experiment will cause harmful interference is difficult. At the time the phrase “potentially harmful interference” was negotiated, significant concern existed that the planned, but yet conducted, second Project West Ford experiment would result in harmful interference to space activities. Furthermore, Project West Ford’s purpose was to discover what result, be it interference or otherwise, the dispersal of copper dipoles would have on radio communications. In this sense, the term “potentially” expands the reading of the provision beyond planned actions or experiments that would cause harmful interference; and instead encompasses activities and experiments that would cause interference that is potentially harmful....*

*Harmful interference in outer space can be divided into three primary categories: (1) Observational Interference (i.e. either terrestrial based astronomical observations or space based terrestrial observations), (2) Radio Frequency Interference, and (3) Physical Interference (i.e. interference with the freedom of physical movement and/or physical operations in outer space)....*

*Read together, the operative language of “has reason to believe that an activity or experiment...would cause potentially harmful interference” places the responsibility and authority to determine whether a State has reason to believe and whether the planned action would cause potentially harmful interference with the State charged with the affirmative obligation to consult. This in turn allows States a wide degree latitude to determine whether or not this triggering condition is met.<sup>17</sup>*

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<sup>17</sup> Michael Mineiro, “FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty” 34(2) *Journal of Space Law* 321 (2008) at 336-338.

### **3<sup>rd</sup> Condition: Activities of other States Parties in the peaceful exploration and use of outer space.**

*The 3<sup>rd</sup> condition requires potentially harmful interference to interfere with the peaceful exploration and use of outer space of other States Party. This raises the question of whether or not other States Party activities meet the criteria of peaceful use and exploration. If the exploration and use of other States Party to the Treaty are not peaceful, then there is no obligation to undertake appropriate international consultations with regards to potentially harmful interference with non-peaceful use and exploration of outer space. For example, an experiment that would cause potentially harmful interference with a space object of a State Party carrying nuclear weapons in orbit would not trigger the 3<sup>rd</sup> condition, so long as the orbiting nuclear weapons are not sanctioned under international law.<sup>18</sup>*

#### **What are appropriate international consultations?**

*The Treaty neither proscribes the procedure for appropriate international consultations nor designates an agency to which States should turn for the authoritative evaluation of proposed uses or experiments. [50] As a result, the procedure and substantive nature of “appropriate international consultations” will depend on the nature of the planned activity or experiment. [51] One can logically infer that a State is procedurally obligated, at minimum, to contact States Parties to the Treaty whose peaceful explorations and use of outer space would experience potentially harmful interference. One can also logically infer that the substantive obligation requires, at minimum, that these States be provided with information sufficient to take appropriate action to prevent potentially harmful interference with their uses or explorations in outer space, the Moon and other celestial bodies. Consider that the object and purpose of Article IX is guided by principles of “cooperation and mutual assistance” with “due regard to the corresponding interests of all other States Parties to the Treaty.” [52] Interpreting the international consultation obligation provision as ad minimum requiring a State to fulfill the aforementioned procedural and substantive obligations is a good faith interpretation of the Treaty given the terms of the Treaty in their context and in the light of its*

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<sup>18</sup> Michael Mineiro, “FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty” 34(2) *Journal of Space Law* 321 (2008) at 338.

*object and purpose. Imposing any less of an obligation would emasculate the international consultation clause of Article IX, a result that is unreasonable.*<sup>19</sup>

### **Right to Request Consultation**

Article IX also provides States Parties with a right to request consultation concerning “an activity or experiment planned by another State Party in outer space” for which the State requesting consultation must have “reason to believe [the planned activity or experiment]...would cause potentially harmful interference with activities in the peaceful exploration and use of outer space....”

The legal practicality of this right is questionable because:

(1) The State making the request must have been both aware of the planned activity and able to achieve reason to believe of its potential harmful interference, and also because

(2) Given that States generally have a right to communicate requests to foreign governments, only in extraordinary situations, such as when States Party have absolutely no formal diplomatic communication, will the right prove of practical legal use.

It is much more likely that the practical use of this legal right will manifest in the political sphere because it can be exercised with the threat of public political shaming if the State receiving the consultation request refuses to respond.

### **What legal and political consequences will result from a State breaching the Article IX prior consultation obligation?**

The immediate legal consequences of a material breach of the obligation to engage in prior consultations are minimal. While in theory States can be held under international law as responsible for violating the obligation, in practice there is no international legal precedent in which States Party to the *Outer Space Treaty* have sought remedy in an international legal tribunal or mediation for claimed violations of the prior consultation obligation. This is most likely because as the experiment and/or activity will have already taken place, all legal remedy will therefore be limited to remedial forms such as sanctions and compensation. Compensatory remedy will be of limited use as any harmful interference experienced by other States Party will be hard to quantify. Furthermore, physical damage caused to other States Party’s space objects is be subject to Article VI and Article VII of the *Outer Space Treaty* (and also possibly the *Convention on the International Liability of Damage Caused by Space Objects*).

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<sup>19</sup> Michael Mineiro, “FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty” 34(2) *Journal of Space Law* 321 (2008) at 338-339.

The political ramifications of the consultation obligation are much more important. Breaching the consultation obligation of Article IX will provide a legal norm that can be leveraged against the violating State in a political context. Art. IX can be used to undermine the political position of a violating State, influencing the opinions of the general public discourse and the international political community against the violating State. The violation of the consultation obligation also provides legal justification for States to respond with bilateral, multilateral, and/or U.N. sanctioned responses. Depending on the result of the activity/experiment that was undertaken but not consulted, the response of States may range from ignoring the violation, to requesting U.N. Security Council action, to the unilateral use of force on the basis of self-defence under Article 51 of the U.N. Charter.

### **Application to Military Activities**

It is important to note that Article IX does not distinguish between military and civilian activities, therefore the requirements of Article IX apply fully to military activities in space.<sup>20</sup> The application of Article IX to military activities is however subject to the Charter of the United Nations and general international law, including international law governing armed conflict. As such, in certain situations Article IX obligations may be pre-empted by other norms of international law.<sup>21</sup>

### **Maintaining International Peace and Security: Article IX prior consultation as a Confidence and Security Building Measures**

Article IX has the ability to enhance the future maintenance of international peace and security in outer space due to its ability to serve as a confidence and security building measure, preventing and/or deescalating incidents of inadvertent interference. Prior consultation provides States with the opportunity to pre-emptively resolve ambiguities and concerns of space activity intent, provide appropriate notice of planned activities that may raise concern due to spatial/temporal proximity, to exchange information on potential environmental impact and/or harmful inference, and also to create an environment of transparency and openness.

Traditionally, State practice has been supportive of appropriate consultation for planned civilian and commercial activities. However, State practice indicates little support for Article IX

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<sup>20</sup> Robert Ramey, “Armed Conflict on the Final Frontier: The Law of War in Space,” 48 A.F. L. REV. 1, 76-77 (2000).

<sup>21</sup> For example, ASAT activities or experiments conducted during a time of armed conflict sanctioned under international law, directed against a belligerent, or sanctioned by the U.N. Security Council necessary for the maintenance of international peace and security may be governed by norms of international law that pre-empt Article IX positive obligations. **See** Robert Ramey, “Armed Conflict on the Final Frontier: The Law of War in Space,” 48 A.F. L. REV. 1, 76-77 (2000). **See also** Michel Bourbonniere, “National Security Law in Outer Space: The Interface of Exploration and Security,” 70 J. Air L. & Com. 3, 7-14 (commenting that “the Outer Space Treaty was not meant to change the law governing means and methods of warfare.”).

prior consultations regarding military space activities, in particular with States perceived as strategic space competitors.<sup>22</sup> In the interests of maintaining international peace and security, States should remedy this deficit in State practice and provide prior consultations with other States regardless of the nature of a space activity, so long as other States' activities may be harmfully interfered with. Such consultation need not compromise the national security interests of the obliging State. States can achieve effective international consultations, fulfilling their obligation of due regard and enhancing international peace and security, while still only providing limited information as is necessary for the consulted State to protect their own interests.

As the Article IX consultation provision stands today, it is of limited scope, applying only to planned activities that would potentially cause harmful interference. In order to further strengthen prior consultation as a confidence and security building measure, States should negotiate and enter into a non-binding "code-of-conduct" that further elaborates, both substantively and procedurally, the Article IX obligation.<sup>23</sup>

### Conclusions

Article IX language allows for significant subjectivity in interpretation and application of the consultation obligation. Nonetheless, ad minimum States must be provided with information sufficient to take appropriate action to prevent potentially harmful interference with their peaceful activities in outer space. State practice indicates that in the field of military activities, in particular weapons testing, prior consultation is not consistently practiced.

Article IX has an important role to play in the future maintenance of international peace and security in outer space. The consultation obligation should be used as a transparency and confidence building measure, preventing and/or deescalating incidents of inadvertent interference. In order to further strengthen prior consultation as a confidence and security building measure, States should negotiate and enter into a non-binding "code-of-conduct" that further elaborates, both substantively and procedurally, the Article IX obligation.

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<sup>22</sup> Michael Mineiro, "FY-1C and USA-197 ASAT Intercepts: An Assessment of Legal Obligations under Article 9 of the Outer Space Treaty" 34(2) *Journal of Space Law* 321 (2008) at 345-347.

<sup>23</sup>For examples of code-of-conduct provisions that may be suitable to enhance prior consultations, **See** Michael Krepon & Michael Heller, "A Model Code of Conduct for Space Assurance" 77 *Disarmament Diplomacy* (2004); proposing a model code with the following relevant articles: Art. IV (100 hrs notice prior to close approach of a satellite), Art.V (special caution zones), Art.VI (dangerous manoeuvres), Art. IX (establish a formal communication system specifically consultations), & Art. XVIII (semi-annual consultations). **See also**, Phillip Baines & Adam Cote, "Promising Confidence and Security Building Measures for Space Security" in *Disarmament Forum: A Safer Space Environment* (UNIDR, 2009 (4)); proposing that "a State should give at least 72 hours prior notice of any high-power laser or microwave illumination of any point in outer space originating from the territory, vessels, aircraft or satellites under its jurisdiction and control, where it has reason to believe that there would be a significant risk of disrupting or denying the observation or communication signals of an active satellite maintained on the registry of another State" and that "in the isolated event that a single satellite maintained on the registry of one State collides with another satellite maintained on the registry of another State, or one satellite purposefully approaches or makes physical contact with another satellite without giving the prior notice or gaining the appropriate approval required under CSBM 6, each affected State should consult with one another without delay."