FRAMEWORKS FOR SPACE RESOURCE ACTIVITIES AND THE DUE REGARD PRINCIPLE

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Introduction: This abstract is part of a larger project addressing how the principle of due regard, found both in general international law and in the Outer Space Treaty specifically, can be used to implement norms of responsible behavior in space and promote the sustainable growth of space activities across the civil-commercial-military spectrum. Specifically, this abstract addresses how existing approaches to the legal management of space resource utilization can be incorporated through the due regard principle, with a focus on the Artemis Accords and Hague International Space Governance Working Group's Building Blocks.

The Due Regard Principle: The principle of due regard is an underutilized space law tool that could, if embraced, play a significant role in establishing norms of responsible behavior in space. With an understanding of what due regard entails and with consequences for acting without due regard (which would be a breach of an international law obligation), States could create a regime establishing safe space resource operations that protect the investment of those engaging in the activity while simultaneously avoiding conflicts rooted in the non-appropriation principle. [2, Art II]

Due Regard in the Outer Space Treaty. The due regard principle, enshrined in Article IX of the Outer Space Treaty, requires that "States Parties to the Treaty … 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." [2] Importantly, this provision modifies the broad right granted to all states under Article I of the Outer Space Treaty to freely use and explore outer space. It constrains the Article I right to a logical scope, essentially - exercise your freedom of use in a way that does not unreasonably limit other States' congruent freedom of use. In this formulation, due care is a positive obligation that forms part of the regulatory framework of the Outer Space Treaty. [3]

Due Regard in General International Law. The principle is found not only in space law, but also in other areas of international law. For example, the principle has been found to exist in customary international law in a maritime context as early as 1957. [4] The due regard principle also reflects a customary requirement to act with due diligence, which is an obligation of conduct rather than result. That obligation is confirmed in an environmental law context in the International Court of Justice's (ICJ) decision in *Pulp Mills on the River Uruguay.*

The UN Convention on the Law of the Sea (UNCLOS) contains the phrase 'due regard' 22 times. Of most relevance by analogy to space, it appears as follows in Article 78, modifying the rights of the freedoms of the high seas: "These freedoms shall be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas..." [5] This provision is considered to be a codification of customary international law, and is analogous to the duty of due regard in outer space.

In the *Chagos Marine Protected Area Arbitration*, the tribunal interpreted UNCLOS due regard as follows: "…the ordinary meaning of 'due regard' calls for the [State party] to have such regard for the rights of [another State party] as is called for by the circumstances and by the nature of those rights. The Tribunal declines to find in this formulation any universal rule of conduct." Thus, the application of the due regard principle occurs on a case-by-case basis. We therefore know we can formulate concepts of due regard specific to the space resource utilization context. While the results of such analogies are pursuasive rather than dispositive, the fact that cases exist addressing the application of the principle in a high seas context (though there are not such cases in a space context) is helpful.

Due Regard as the Prime Directive: It is my contention that the due regard principle in Article IX of the Outer Space Treaty is the hook onto which we can attach norms of responsible behavior across a wide variety of space activities. There has been significant discussion of the use 'soft law' mechanisms in international law, given the lack of political will for new binding international treaties. Typically soft law instruments are agreements such as UN Resolutions that do not have binding force (as an example, the Remote Sensing Principles Resolution). We can also consider instruments adopted by other bodies that significantly influence behavior (such as the IADC Debris Mitigation Guidelines or the COSPAR Planetary Protection Policy) in the soft law context. When such behavior is consistent in line with those instruments, that "state practice" takes on importance in international law (note that under Article VI of the Outer Space Treaty, the behavior of private actors is imputed to states). It is likely that this type of soft law mechanism will be pursued to develop norms associated with space resource activities. While there are limitations to the usefulness of these tools, when properly applied they can create legal standards of behavior.

Treaty Interpretation Tools. In customary international law as codified in article 31.3(b) of the Vienna Convention on the Law of Treaties, subsequent state practice under a treaty can be used to interpret the

scope of rights and obligations under a treaty. [5] Thus, consistent behavior that is not labeled as violation of a particular provision and that is carried on by a number of state parties to the treaty will provide an interpretive indication that the behavior is in line with the treaty.

Likewise, under 31.3(a), "any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions" may be taken into account. Thus, it is possible to regard widely adopted soft law instruments as subsequent agreements for the purposes of interpreting the due regard principle. For example, failing to mitigate debris in line with the IADC guidelines could be considered failure to act with due regard.

The Crystallization of Customary International Law. Soft law instruments can also lead to the crystallization of customary international law, which itself is binding on states per ICJ Statute Article 38.1(b). In order for such a law to exist, there must be consistent state practice as well as *opinio juris* (essentially, evidence that a state believes they are bound to act in accordance). A soft law instrument that significantly and consistently alters state behavior can assist in the formation of such a rule, as the behavior itself would be the state practice, with the resolution that precipitated the change in behavior serving as evidence for the rationale behind the practice. Proving a rule of customary international law is quite difficult, however.

Relationship to Liability. Failure to act with due regard can also provide evidence of fault, incurring liability. The existence of relevant standards against which to compare any state conduct that led to damage can help to assign liability.

The Artemis Accords: For the purposes of this discussion, the most important elements of the Artemis Accords are Sections 10 and 11, addressing Space Resources and Deconfliction of Space Activities, respectively. [6] The Accords acknowledge the legality and benefit of space resource utilization activities, "commit to respect the principle of due regard" and "commit to the safe and efficient extraction of space resources in support of sustainable space exploration and other operations." Section 11 goes on to explain how the partners will use "safety zones" in particular to avoid interference. Though the Accords are not a binding treaty, they can be used to guide behavior of any states participating in the Artemis Program with the US, establishing state practice for the purposes articulated above.

The Building Blocks: The Building Blocks were designed by The Hague International Space Resources Governance Working Group and are intended "to lay the groundwork for international discussions on the potential development of an international framework" for space resource activities. [7] The Building Blocks reaffirm relevant provisions of the Outer Space Treaty, including the due regard principle, and further provide key elements for a framework, including priority rights, resource rights, and safety zones. Significant attention is given to avoiding, mitigating, monitoring, and redressing any harmful impacts that may be caused by space resource activities. Though they reaffirm the relevance of the due regard principle, the Building Blocks do not make an express claim to set the parameters for what acting with due regard looks like.

Conclusion: The due regard principle is an ideal multipurpose tool to manage the competing interests of states in their space activities, including space resource activities. Specific norms of behavior for such activities can be developed and incorporated into the body of space law through Article IX of the Outer Space Treaty. States, however, have largely failed to characterize behavior in space with reference to the due regard principle. Both the Accords and the Building Blocks include elements such as safety zones that could be expressly tied to due regard. There is still time to rectify this missed opportunity. Any efforts to articulate a framework for space resource activities should expressly state that they are framing standards and expectations in line with the due regard principle. It should be noted that any guidelines are implemented "to fulfill the obligation to act with due regard" to create a clear nexus with Article IX of the Outer Space Treaty.

References: [1] Dean of Space Education, Air University, 325 Chennault Circle, Maxwell AFB, AL, USA 36112. Andrea.harrington.1@au.af.edu

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[5] Vienna Convention on the Law of Treaties (1969) 1155 UNTS 331

[6] NASA (2020) *Artemis Accords*, https://www.nasa.gov/specials/artemis-accords/img/Artemis-Accords-signed-13Oct2020.pdf

[7] Building Blocks For The Development Of An International Framework On Space Resource Activities https://www.universiteitleiden.nl/binaries/content/assets/rechtsgeleerdheid/instituut-voor-publiekrecht/lucht--en-ruimterecht/space-resources/final-bb.pdf