2008

Softly, Softly Catchee Monkey: Informalism and the Quiet Development of International Space Law

Gérardine Meishan Goh
German Aerospace Center, Bonn

Follow this and additional works at: https://digitalcommons.unl.edu/nlr

Recommended Citation
Available at: https://digitalcommons.unl.edu/nlr/vol87/iss3/5

This Article is brought to you for free and open access by the Law College of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Law Review by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
Gérardine Meishan Goh*

Softly, Softly Catchee Monkey: Informalism and the Quiet Development of International Space Law

TABLE OF CONTENTS

I. Introduction ........................................ 725
II. Informalism, Soft Law and International Space Law ... 727
   A. Interpreting Non-Treaty Agreements: Do They Bind Parties? 728
   B. Yea- and Naysayers to Non-Treaty Agreements .... 731
III. Practically Speaking: Informalism in International Space Law ............................................ 736
   A. Space Debris Mitigation and Re-Mediation ........ 737
   B. Prevention of the Weaponization of Outer Space ... 740
IV. Beyond the Initial Panic: Informalism as a Positive Development for Space Law-Proposals ............ 743
V. Conclusion: Catching the Monkey at the Black-Tie Soirée ................................................ 745

I. INTRODUCTION

Questioning the juristic legitimacy of informalism and international soft law is not new. Despite the prevailing skepticism, the hard truth is that States and other actors on the international plane have always involved various methods of supplementing and avoiding legal obligations. The burgeoning ranks of stakeholders on the international level need international regulation to provide a consistent

* Project Manager and Legal Advisor, German Aerospace Center (DLR), Bonn, Germany; Lecturer, Faculty of Law, University of Cologne, Germany; Ph.D. (Leiden), LL.M. (London), LL.B. (Hons.) (Singapore). Email: Gerardine.Goh@dlr.de. The opinions in this Article are those of the author and in no way engage the organizations to which she is affiliated. The author thanks Gesa Milbrett for her research assistance. This Article is an expanded and amended version of a paper delivered on a Panel discussing the "Informal Regulation of Space Activities" at the University of Nebraska College of Law’s Space and Telecommunications Law Conference, May 2, 2008.
framework on which to base their activities. Where the traditional methods of international treaty-making have proven insufficiently efficient or up-to-date, recourse to informalism and soft law methods has provided the panacea.

This is particularly clear in the field of international space law. In the few years after the 1957 launch of Sputnik I shocked the world, the international community quickly cobbled together treaty agreements outlining the international obligations of States in relation to activities in outer space. The early glory days of rapid treaty-making quickly burnt out, however, with States choosing, from the 1980s, to stop the lawmaking process at the stage of United Nations General Assembly Resolutions instead. Recently, international space lawmaking has "softened" further—with substantive progress made by national agencies and professional experts through the drafting of Codes of Conduct and Best Practices Guidelines—with no move towards the adoption of another formal treaty. This in fact leaves international space law in quite a conundrum. Confronted with rapid technical, economic and policy changes in the field, legal regulation of space activities has not been able to keep pace.

The complexity of space activities has quickly outrun traditional methods of lawmaking. This has led to the necessitation of action from international organizations, specialized agencies, private bodies and professional associations that do not nicely fit into the State-centric paradigm of international lawmaking. These actors appear to undertake a "softly, softly, catchee monkey" approach—rather than rocking the stable international space law boat, they are choosing instead to focus on non-binding, non-treaty agreements. The motivation behind this approach seems to be a belief that behavior and action at the international level in space activities can be best influenced in a non-confrontational, informal way. The informalism of this approach has caused some controversy. The juristic value of informal non-treaty agreements and their role in the international legal framework have increasingly become issues that concern international space law.

This Article looks at the role of informalism and soft law in the contemporary formation of international space law. It first considers the theoretical issues related to informalism, and then looks at the advantages and disadvantages associated with non-treaty agreements. The practical usage of non-treaty agreements in international space law is examined through the developments in the mitigation and remediation of space debris, as well as in the prevention of the weaponization of outer space. Proposals are made with regard to informal non-treaty making, so as to offset the possible disadvantages of informalism.
SOFTLY, SOFTLY CATCHEE MONKEY

II. INFORMALISM, SOFT LAW AND INTERNATIONAL SPACE LAW

Myriad instruments delineating "soft" international agreements have long been sources of scholastic and practical controversy. Propo-
nents of the supremacy of State consent have debated with those who favor international regulation.\(^1\) What divides scholars so sharply is that this type of "law" is not among the sources of law listed in Article 38 of the Statute of the International Court of Justice ("ICJ Statute").\(^2\) This "leads us into difficult and controversial dogmatic terrain."\(^3\)

An amazingly varied tapestry of soft law instruments exists,\(^4\) with various degrees of differences in form, language, parties, objectives and enforcement procedures.\(^5\) Soft law includes binding instruments that only comprise soft obligations, as well as non-binding instru-
ments that are accepted by States, international organizations and re-
gional arrangements. This Article will focus on instruments outlining
the commitments that States, international organizations and re-
gional arrangements enter into without concluding a formal, binding
treaty under international law. Hillgenberg termed these instru-
m ents "non-treaty agreements,"\(^6\) a term that this Article will also use.

The crux of the concerns surrounding soft law involves the basic
tenets of international law—the principles of sovereignty and consent. Continued debates relating to the definition, scope and role of soft non-treaty agreements manifest the long-running feud between those
championing the overarching primacy of State consent and those who
assert that there should be limitations on State behavior in the inter-
est of international regulation. The positivist perspective stipulates
that international law derives solely from the will of sovereign

---

1. For an excellent review of the role of soft law in international regulation, see
   generally Christine Chinkin, Normative Development in the International Legal
   System, in COMMITMENT AND COMPLIANCE—THE ROLE OF NON-BINDING NORMS IN
   THE INTERNATIONAL LEGAL SYSTEM 21, 21 (Dinah Shelton ed., Oxford Univ. Press
   2000).
   [hereinafter "ICJ Statute"].
3. Hartmut Hillgenberg, A Fresh Look at Soft Law, 10 EUR. J. INT'L L. 499, 499
   (1999).
4. Together with the diversity of "soft law" instruments, there is also a plethora of
   scholarly and academic articles on the topic. See generally Székely, Non-binding
   Commitments: A Commentary on the Softening of International Law Evidenced in
   the Environmental Field, in INTERNATIONAL LAW ON THE EVE OF THE TWENTY-
   FIRST CENTURY 173 (United Nations 1997); Michael Bothe, Legal and Non-Legal
   Norms: A Meaningful Distinction in International Relations?, 11 NETHERLANDS
   INT'L L. 66 (1980); Oscar Schachter, The Twilight Existence of Nonbinding
   International Agreements, 71 AM. J. INT'L L. 300 (1977); Prosper Weil, Towards
5. Christine M. Chinkin, The Challenge of Soft Law: Development and Change in
Given that sovereign States are very unlikely to curtail their own sovereignty unless such curtailment were in their interest, it is not surprising that treaties are often long in the making, and face much reluctance in signature, ratification or accession.

Cue the entry of soft law, non-treaty agreements. Comprising all the functional aspects of the substantive discussions, without the legal import of a binding treaty framework, these non-treaty agreements are generally recorded in declarations or recommendations that evince a workable compromise. It is precisely this dual-edged character—being both “soft” and “law”—that has given rise to the outcry, both for and against, the employment of non-treaty agreements in international law.

A. Interpreting Non-Treaty Agreements: Do they bind parties?

Some scholars have entirely rejected the notion of international regulation and law-making through such non-treaty agreements. These scholars have argued that the criteria listed in Article 38(1) of the ICJ Statute, as have been applied by the Permanent Court of International Justice in the *Lotus* case, must be fulfilled in order to ensure the formal legal validity of any instrument. As such, non-treaty agreements cannot possibly add to the matrix of international law, nor can they have any meaningful binding effect on parties. Yet, it can be seen that both binding frameworks and the “substrata of non-binding principles” have been incorporated into the means by which normative standards of appropriate international action is regulated.

As Chinkin points out, this is precisely the “inevitable paradox” surrounding international non-treaty agreements. In the majority of these cases, the adoption of an agreed compromise in a non-binding format was a deliberate choice. It seems then, that the question as to whether such agreements bind parties is moot—given that international law is premised on the consent of sovereign States, the mere fact that these States choose a non-binding arrangement must, in and

---

13. Id. at 25.
Of itself, be evidence of the fact that such non-treaty agreements cannot bind.

Or can they? Among the challenges facing the drafters of non-treaty agreements are: What are the applicable rules for interpretation? Are there consequences upon non-fulfillment? How can disputes relating to the agreement be settled? These questions lead to the heart of the inquiry as to whether non-treaty agreements carry legal force. The International Court of Justice, in the South West Africa case, opined that it was not the Court's business "to pronounce on political or moral duties." Similarly, what matters is whether obligations in such agreements are legal—whether they carry binding force.

One of the precepts of international law is that parties are free to choose the design, form and content of agreements they enter into, provided jus cogens norms are not violated. Non-treaty agreements are generally concluded when the parties want to ensure that there would not be a breach of international law (with the corresponding reprisal and compensatory consequences) in the case of non-fulfillment. As mentioned above, the overarching intention of the parties not to be bound therefore argues against the binding effect of such agreements.

The interpretation of non-treaty agreements also takes cognizance of two principles of international law: bona fides (good faith), and venire contra factum proprium (estoppel). It may be argued that if parties enter into agreements in good faith, and then act in reliance on the rights and obligations enshrined in that agreement, the doctrine of estoppel may prevent other parties from going back on their word.

---

18. ROSALYN HIGGINS, PROBLEMS AND PROCESS: INTERNATIONAL LAW AND HOW WE USE IT 35 (Oxford Univ. Press 1993) (explaining the dichotomy between "detrimental reliance" and the "intention to create a binding obligation").
19. Estoppel has been regarded by many highly qualified publicists as a general principle of international law, stemming from good faith and consistency. See Temple of Preah Vihear, 1962 I.C.J. 6, at 39–51, 60–65 (separate opinions of Judges Alfaro and Fitzmaurice); HERSCH LAUTERPACHT, THE DEVELOPMENT OF INTERNATIONAL LAW BY THE INTERNATIONAL COURT 168–72 (Stevens & Sons Ltd. 1958). It must be noted that Brownlie cautions that estoppel should be used with great care, as there is no particular coherence or source of estoppel as a principle in international law. See Temple of Preah Vihear, 1962 I.C.J. 6, at 143 (Spender, J., dissenting); BROWNLIE, supra note 16, at 616 (citing inter alia Christian Dominié, A Propos du Principe de l'Estoppel en Droit des Gens, in RECUEIL D'ÉTUDES DE DROIT INTERNATIONAL EN HOMMAGE À PAUL GUGGENHEIM 327, 364
Further, when seen in the light of the supremacy of party intention, there appears also no ground for denying parties the possibility to make commitments with lesser legal consequences than a full-blown treaty, especially where the parties' declared intentions coincide. As such, non-treaty agreements can perhaps be considered binding on other parties, if one party acts in good faith and in detrimental reliance upon them.

The International Court of Justice in the Gabcikovo-Nagymaros case appears to be moving away from a sterile application of interpretation rules and towards a more complex view of party relations. Without impinging on the dichotomy between binding and non-binding agreements in international law, there appears to be a gradated scale of enforcement and dispute settlement mechanisms that could accrue to parties under international law.

Carrots are also used more often than sticks in non-treaty agreements. It is an interesting point that in general, parties choose to comply with non-treaty agreements. Ultimately, whether or not a party abides by any imposed obligation, whether it is legally binding or otherwise, depends almost entirely on the party's intentions and will. Enshrining an obligation on the altar of a treaty framework does no more to ensure compliance where there is no intention to comply. Conversely, simply because an obligation is not couched in treaty terms does not mean that parties are less willing to comply. In the horizontal system of international law, instruments, laws and regulations that engage political will are those that will be complied with.

(1968) (Switz.); ANTOINE MARTIN, L’ESTOPPEL EN DROIT INTERNATIONAL PUBLIC (A. Pedone, ed. 1979). The present author is of the view that estoppel operates as a basic principle of the law where there has been detrimental reliance in the case. This position has also been taken up by the International Court of Justice in its decisions in: North Sea Continental Shelf Cases (F.R.G. v. Den.; F.R.G. v. Neth.), 1969 I.C.J. 3, 26 (Feb. 20); Delimitation of the Maritime Boundary in the Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. 246, 309 (Oct. 12); Arbitral Award Made by the King of Spain (Hond. v. Nicar.), 160 I.C.J. 192, 213 (Nov. 18).

20. Hillgenberg, supra note 3, at 506. This is not to say that there is a sliding scale of legal commitment—either an agreement is legally binding or it is not. However, the consequences for non-fulfilment may be different in each of the cases. Id. at 507.


This is no different in the case of non-treaty agreements. In fact, the multifaceted versatility of informal non-treaty agreements may provide a way through which the international community can escape the stilted exclusivity of creating law only through treaty-making.

B. Yea- and Naysayers to Non-Treaty Agreements

Given the quagmire of complexity and criticism that generally accompanies non-treaty agreements, their continued widespread usage may seem perplexing. Yet there are good reasons for their use, especially in the field of space activities. These include the following:

- Non-treaty agreements constitute a versatile pré-droit regime that can galvanize developments in the field.

A non-treaty agreement may be a necessary step on the ladder towards a "hard" legal regime such as a treaty framework. As awareness, acceptance and application of the standards enunciated by the non-treaty agreement increases, the obligations become more "hard." This flexible, preliminary framework gives impetus to further legal development in the field. An excellent illustration is the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, unanimously adopted by the UN General Assembly on December 13, 1963. This early, non-binding resolution laid the groundwork for the standards that would later find expression in the 1967 Outer Space Treaty.

- Non-treaty agreements are good mutual confidence-building measures.

Informal non-treaty agreements have proved to be effective confidence-building measures. Aside from providing a possibility for talks between potential competitors and antagonists, the informality of non-treaty agreements also allows for "soft" obligations to be enunciated. These, in turn, have ensured the inclusion of capacity building and technology transfer provisions, generally on a mutually acceptable basis. 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\textsuperscript{29} is a sterling example in international space law of a confidence-building non-treaty instrument.

- 	extit{Simpler negotiating and finalization procedures allow the framework to be more rapidly put in place.}

Without long treaty conferences and ratification procedures, the simpler negotiation and finalization processes of non-treaty instruments may prove more efficient. Parties are more likely to haggle over a potentially binding document than a "soft law" instrument, and this may also slow the process down. In fields where rapid evolution of the law is necessary due to circumstantial changes—such as in the protection of the environment, and in the rapidly evolving arena of space activities—the rapidity with which non-treaty agreements can be concluded is a definite advantage.

- 	extit{Non-treaty agreements contribute toward the formation of customary international law.}

The International Court of Justice opined in 	extit{obiter} in the 	extit{Continental Shelf} cases that evidence of the formation of customary international law can be found through subsequent State practice and 	extit{opinio juris}\textsuperscript{30}. Non-treaty agreements do not, of themselves, constitute customary international law\textsuperscript{31}. However, where a non-treaty agreement has been consistently acted upon—such as where States Parties incorporate obligations accrued under non-treaty agreements into their domestic legislation—this may also be taken as evidence of State practice and 	extit{opinio juris} for the formation of customary international law\textsuperscript{32}.

A clear example in international space law can be found in Principle XII of the 1986 Principles Relating to Remote Sensing of the Earth from Outer Space.\textsuperscript{33} Principle XII safeguards the right of non-discriminatory access by sensed States to remote sensing data over their territory at reasonable cost price. The 1986 Principles were passed by consensus at the United Nations General Assembly and are, therefore, not binding. However, with the subsequent State practice complying with this obligation,\textsuperscript{34} and its incorporation in many national laws

\textsuperscript{30} Continental Shelf (Libyan Arab Jamahiriya v. Malta), 1984 I.C.J. 3 (Mar. 21).
\textsuperscript{31} Hans W. Baade, \textit{The Legal Effects of Codes of Conduct for Multinational Enterprises}, in \textit{STUDIES IN TRANSNATIONAL ECONOMIC LAW, VOLUME 1: LEGAL PROBLEMS OF CODES OF CONDUCT FOR MULTINATIONAL ENTERPRISES} 3 (Norbert Horn, ed. 1980).
\textsuperscript{32} Id.
governing remote sensing licenses, the obligation enshrined in Principle XII is considered by many leading scholars to have entered into customary international law.

- **A premature formal treaty agreement is prone to a high risk of failure.**

In most fields of international law, treaty regimes are established ex post facto to regulate or remedy circumstances that, in many cases, already exist. This is markedly not the case in international space law, where international treaties tend to be concluded preemptively—prior to the actual situation that necessitates such regulation. International space law has already borne witness to the fact that a negotiated treaty, even when opened for signature, can still fail spectacularly. The 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, with its dismal 13 ratifications and 4 signatures, none from any major space-faring nation, is the case in point. Now the focal point of arguments as to why treaty regimes for space law are not viable, the Moon Agreement, though a treaty, has less in the credibility stakes than, for example, the 1986 Remote Sensing Principles or the 1992 Nuclear Power Sources Principles, both of which are "soft," non-binding General Assembly resolutions. In some cases, the political fallout of a failed treaty is more damaging on the field of law than a "soft" regime that is perceived to be successful.

- **A larger breadth of parties can be accommodated with non-treaty agreements.**

One of the disadvantages to many treaties negotiated and concluded under the United Nations system is the narrow breadth of locus standi afforded to potential parties. These treaties address almost exclusively States Parties, with more enlightened regimes perhaps offering accession possibilities for international intergovernmental organizations, and observer status for non-governmental
organizations. In today's global political economy, this framework is hopelessly outdated. In particular, actors on the global level today range from individuals to States, multinational corporations, grassroots, regional and international non-governmental entities, transnational organizations and international intergovernmental agencies. Nowhere is this more evident than in the field of space exploration and applications. It is essential that the varied actors are given the possibility of locus standi where necessary, as well as dispute settlement procedures that take their diverse interests and characteristics into account. The possibility to achieve this is greater with non-treaty agreements, traditionally already meant for actors outside of the category of States.

- Non-treaty agreements are more adaptable to rapid changes in the field.

Given their informality, non-treaty agreements provide the possibility to efficiently and effectively respond to ambient changes in the field in question. Non-treaty agreements meld international regulation over high-risk space activities while maintaining adaptability to retain their relevance in evolving situations. An example of this can in particular be seen with the Space Debris Mitigation Guidelines, which are discussed in the next Part.

Naysayers point to three very convincing arguments that informalism and non-treaty agreements have a negative impact on the law. These include:

- Non-treaty agreements are not binding and cannot be enforced;
- The negotiation process through consensus may not be simpler or more efficient; and
- Non-treaty agreements may contribute to the incoherence and fragmentation of the international legal system.

It is true that non-treaty agreements are not binding, and therefore ultimately would face serious problems with enforcement. However, treaty and non-treaty agreements have historically enjoyed

__________________________

40. The UN Committee on the Peaceful Uses of Outer Space ("COPUOS") grants observer status to, for example, the European Space Agency ("ESA") and to INTER-SPUTNIK. Other UN treaty frameworks that grant observer statuses to international intergovernmental organizations include the 1992 Convention on Biological Diversity and the World Trade Organization.

41. See Gérardine M. Goh, DISPUTE SETTLEMENT IN INTERNATIONAL SPACE LAW 139–91 (2007).

42. Id.

43. See infra Part III.A.
largely the same compliance rates.\textsuperscript{44} In the case of international space law, thus far no issue has arisen that has defied either a peaceful settlement of the dispute, or a direct breach of an obligation with no consequence, whether that obligation is hard or soft. To date, therefore, the first concern has not affected space law.

The second concern is of a greater import. The timeframe of negotiations before the adoption of a substantive United Nations General Assembly Resolution on activities in outer space ranges from anywhere between six and twenty years.\textsuperscript{45} This is a significant finding, especially when contrasted with the establishment of the regime under the 1967 Outer Space Treaty, which took all of nine years for its negotiation, drafting, opening for signature and entry into force.\textsuperscript{46} It must be noted however, that the Outer Space Treaty was based on an earlier U.N. General Assembly Resolution,\textsuperscript{47} and its quick conclusion was fueled in part by the political and technical circumstances of the day. However, as will be seen in the next Part, it remains true that the negotiation process, which must generally reach consensus, is not necessarily simpler or more efficient than that needed for a full-blown treaty regime. A more efficient finalization of the agreement is more a function of the political will and circumstantial requirements than of the “softness” or otherwise of the final agreement.

The third imputation is perhaps the most significant. Non-treaty agreements tend to be negotiated in various fora, amongst various actors, and generally almost simultaneously as issues become important. At best, this could lead to an overlap in recommendatory guidelines; at worst, conflicting international standards may emerge. Without a common forum for stakeholders to convene, the diverse discussions could lead to a clear fragmentation of the international legal order through incoherence and conflicting standards. This is especially the case in areas where a clear black-or-white obligation is necessary as opposed to a minimum standard. For example, the prevention of the weaponization of outer space and the preservation of outer space for peaceful purposes is an unequivocal obligation.\textsuperscript{48} It is important especially in this area not to have conflicting views from non-treaty agreements among various groups of stakeholders. On the other hand, standards for safety assurance in human spaceflight, for

\textsuperscript{44} WOLFGANG HEUSEL, \textit{WEICHES VOLKERRECHT: EINE VERGLEICHENDE UNTERSUCHUNG TYPISCHER ERScheinungsformen} 306 (1991).

\textsuperscript{45} This is the time lapse between the initiation of discussions at the U.N. COPUOS. Six years elapsed between the launch of Sputnik I in 1957 and the 1963 Declaration; much more time was necessary for the negotiations in the COPUOS to coalesce into U.N. G.A. Resolutions on other issues relating to space activities.


\textsuperscript{47} See supra note 27.

\textsuperscript{48} See infra Part III.B.
example, may take the “minimum standard” approach. Nevertheless, it is submitted that some procedural and substantive rules for soft-lawmaking through the conclusion of non-treaty agreements should be put in place. The establishment of these rules is urgent, especially considering that informalism and non-treaty agreements are making significant inroads in the regulation of activities in outer space.

III. PRACTICALLY SPEAKING: INFORMALISM IN INTERNATIONAL SPACE LAW

Practically speaking, informalism is well and thriving in various aspects of the development of international space law. From the overarching framework proposed for space traffic management and situational awareness, to the charter developed for disaster management and emergency response, the movement to informalism is gaining ground.

A fascinating trend of note is the increased participation of technicians and scientists in the legal regulation of space activities, either in international fora or through academic and professional associations. The Scientific and Technical Subcommittee of the UN Committee on the Peaceful Uses of Outer Space has in recent years become more actively involved in the formulation, for example, of space debris mitigation guidelines. Various Study Groups of the International Academy of Astronautics have also been engaged in the study of the feasibility of space traffic management regimes, legal-medical liability and regulation of commercial human spaceflight and the space debris situation. Moreover, highly specialized professional associations have been established in the recent years to address specific areas of interest in space activities. A good example of this is the formation of the International Association for the Advancement of Space Safety—a professional association of engineering, technical, scientific and legal practitioners in the field with the objective of establishing safety standards for both manned and un-manned spaceflight. This Part will briefly look at two areas in which informalism has allowed the promulgation of international legal standards for various fields of space activities:

- Space Debris Mitigation and Remediation; and
- Prevention of the Weaponization of Outer Space.

50. See infra Part IV.
51. For information on the International Association for the Advancement of Space Safety, see http://www.iaass.org/ (last visited Nov. 12, 2008).
A. Space Debris Mitigation and Re-mediation

One of the main threats to the outer space environment is orbital debris. The direct imposition of legal obligations for protection of the outer space environment through the mitigation and re-mediation of space debris situation necessitates the passage of a binding international treaty framework. Issues that must be dealt with include: State responsibility, liability, cost-sharing, scheduling, enforcement and verification measures, and dispute settlement mechanisms. The treaty should also be ratified by all space-faring States. Needless to say, given these parameters, this is not likely to happen in the foreseeable future.

Legal provision for the protection of the outer space environment is very minimal within the existing body of international space law. The framework of U.N. treaties dealing with activities in outer space was adopted before environmental protection came to the forefront of international legal regulation. Thus, the U.N. space treaties do not take cognizance of the developments made by international environmental law in the last twenty years. Although general principles for the protection of the outer space environment are enunciated in the 1967 Outer Space Treaty, no clear obligations arise with regard to the mitigation or remediation of space debris. This lacuna is made more complex by the fact that to date there is no internationally accepted definition of "space debris."

Article IX builds upon Article I of the Outer Space Treaty, which reads that the "exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in

---

52. Philippe Sands, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 382 (Cambridge Univ. Press 2003). The other two kinds of damage listed are planetary contamination (forward and backward) and environmental damage caused to the Earth’s surface due to uncontrolled re-entry.

53. This is also the view taken by Joanne Wheeler, The Current Legal Framework Associated with Space Debris Mitigation, 168 J. AEROSPACE ENGINEERING 911, 912 (2007).


55. A draft definition has finally been provided by the International Law Association (“ILA”) in the Annex to Resolution 5 of the Buenos Aires International Instrument on the Protection of the Environment from Damage Caused by Space Debris, 66th Conference of the ILA (1994), as referenced in Karl-Heinz Böckstiegel, The Draft of the International Law Association for a Convention on Space Debris, 38 PROC. COLLOQUIUM ON L. OF OUTER SPACE 69 (1995). The draft definition of space debris is that it comprises “man-made objects in outer space, other than active or otherwise useful satellites, where no change can reasonably be expected in these conditions in the foreseeable future.”
the interests of all countries, irrespective of their degree of scientific or economic development, and shall be the province of all Mankind."56

Article IX of the Outer Space Treaty however, does provide a minimal level of guidance with regard to the environmental protection of outer space, obligating States Parties to be "guided by the principle of co-operation and mutual assistance . . . with due regard to the corresponding interests of all other States Parties to the Treaty."57 Further, Article IX stipulates that the study and exploration of outer space should be conducted "so as to avoid . . . harmful contamination," and States Parties are to "adopt appropriate measures for this purpose."58 The language of Article IX is also repeated in Article 7(1) of the Moon Agreement. The scope of Article IX however, is restricted by its failure to detail exactly what constitutes "harmful contamination" or "appropriate measures," as well as the stipulation that such measures be taken only when States Parties consider "necessary." Therefore, Article IX is not self-executing. Moreover, subsequent practice has not been considered space debris under the classification of "harmful contamination."59

The protection of the outer space environment through the mitigation and remediation of space debris can be considered an extension of the "province of Mankind" principle, as well as the international obligation to have "due regard"60 for other States' activities in outer space. Indeed, the failure to mitigate or remediate any space debris would severely endanger the rights of all other States to use and explore outer space. However, as can be seen from the wording, these provisions are very vague and are left wide open to interpretation.

Evidence that international rule-making for space activities has markedly moved away from treaty-making and towards informalism is particularly clear with regards to Guidelines relating to space debris. In recent years, the mitigation and remediation of space debris has received much attention from the international community of engineers, scientists, technicians and jurists. As a result, this field has witnessed a rapid evolution in informal standard-setting.

The development of standards relating to space debris received a huge launch impetus with the establishment of the Inter-Agency Space Debris Coordination Committee ("IADC"). The IADC—an intergovernmental forum comprised of various space agencies61—

56. Outer Space Treaty, supra note 28, at art. IX.
57. Id.
58. Id.
59. This classification generally refers to forward and backward contamination by biological or radiological sources.
60. Outer Space Treaty, supra note 28, at art. IX.
61. To date, member agencies of the IADC are Agenzia Spaziale Italiana ("ASI, Italy"), British National Space Centre ("BNSC, United Kingdom"), Centre National d'Etudes Spatiales ("CNES, France"), China National Space Administration
drafted Guidelines to mitigate the space debris situation. The IADC Space Debris Mitigation Guidelines\(^6\) reflect and consolidated measures undertaken by its member organizations. These IADC Mitigation Guidelines focus on the prevention of on-orbit spacecraft breakups, the removal of end-of-mission spacecraft and orbital stages, and the limitation of objects released during normal space operations.\(^6\)

The space debris issue has also attracted the attention of the "Space Systems and Operations" Subcommittee of the International Standards Organization ("ISO") "Aircraft and Space Vehicles" Technical Committee. The Subcommittee is in the process of developing technical implementation standards for space debris mitigation measures\(^6\) as the next logical step in line with the work of the IADC.

Further, a Working Group on Space Debris has also been formed within the Scientific and Technical Subcommittee of the U.N. Committee on the Peaceful Uses of Outer Space ("COPUOS"). Working against the context of the U.N. treaties on outer space, the Working Group published the Revised Draft Space Debris Mitigation Guidelines,\(^6\) which are based on the IADC Guidelines. These Revised Draft Space Debris Mitigation Guidelines were endorsed by the COPUOS in 2007.\(^6\)

Again working against the context of the IADC Guidelines, a policy statement entitled the European Code of Conduct for Space Debris


\(^6\) Space Debris Environment Re-mediation Study Group, International Academy of Astronautics, Study (forthcoming 2009). The present author is a member of this Study Group, and a contributing author on legal issues of space debris re-mediation to this Study Group report.


Mitigation has been issued by the European States. This Code of Conduct was drafted by the Network of Centres Space Debris Coordination Group, and represents the work of the European space agencies since 1999. The Code of Conduct is targeted at industry partners and other concerned public and private entities to assist in the application of measures to reduce or prevent the build-up of space debris.

These Guidelines and Codes of Conduct, which serve as recommendatory standards and policy statements, indicate the clear inclination towards a "soft" regulation of space debris. As a next step, the International Academy of Astronautics has established a Study Group to build upon the Guidelines and Code of Conduct and draft a report relating to the re-mediation of the space debris situation. It is only a matter of time before Guidelines relating to the re-mediation of the space debris situation will also be promulgated.

B. Prevention of the Weaponization of Outer Space

The Prevention of an Arms Race in Outer Space ("PAROS") has been on the agenda of the Conference on Disarmament ("CD") since 1985. The issue is specifically addressed in ad hoc committees, established between 1985 and 1994. The output of these committees, in the form of working papers, has been regularly presented to the Secretary General and the annual plenary meetings of the CD with the aim of plugging the gaps in the legal framework relating to the prevention of the weaponization of outer space.

Motivation to negotiate and draft an agreement, in this regard, gained momentum upon the 2001 unilateral withdrawal of the United States of America from the 1972 Treaty on the Limitation of Anti-Ballistic Missile Systems ("ABM Treaty"). Although the ABM Treaty was a bilateral agreement between the United States of America and the (former) Union of Soviet Socialist Republics, the U.S. withdrawal was seen as a clear paradigm shift in the perspectives of one of the two major space powers at the time.

With the demise of the ABM Treaty, the vulnerabilities of space assets and infrastructures were brought to the forefront. Discussion in the CD was mainly driven by China and Russia. In 2001, the same year as the American withdrawal, China proposed a Draft Treaty on the Prevention of the Weaponization of Outer Space. This proposal

69. Conference on Disarmament, Letter Dated 5 June 2001 from the Permanent Representative of China Addressed to the Secretary-General of the Conference on Disarmament Transmitting a Working Paper Entitled "Possible Elements of the
was seconded by Russia. Russia followed this with another Draft of a Treaty on the Prevention of the Placement of Weapons in Outer Space in 2006. Momentum to negotiate and conclude a treaty increased with the recognition by various member States of the necessity to safeguard the peaceful exploration of outer space.

The European States have also taken a firm interest in the issue. The "Weapons in Space" report, submitted by the Assembly of Western European Union ("WEU"), was unanimously adopted by the CD on May 16, 2006. Its follow-up report, "Weapons in Space: Part II," was also unanimously adopted on May 2, 2007. Both of these reports stated that the global space industry will be severely affected by the "disastrous effects of space weaponization," and invited the WEU member States, as well as member States of the European Union ("EU") and the European Space Agency to create a space surveillance network.

All EU member States have voted in favor of the U.N. General Assembly Resolution 61/75 on the "Transparency and Confidence Building Measures ("TCBMs") in Outer Space Activities." A workshop on the topic of "Security and Arms Control in Space and the Role of the EU" was organized in Berlin, Germany, in June 2007. EU member States agreed on the proposal to draft a Space Security Strategy that would be complementary to the already-published European Space Policy. A proposal was also made for EU member States to draft a "Code of Conduct in Space" ("CoC"), as the EU's response to the request for a "concrete proposal" by the General Assembly in its resolution 61/75. The aim of the CoC was to codify the "best practice" standard of member States with regard to space activities.

Discussion on the draft CoC was taken up with the overlap of the weaponization of outer space with civil space activities, space debris mitigation, the European Space Policy and space traffic management in mind. Intra-EU consultations iterated the document to produce the "EU Food for Thought Document on a Comprehensive Code of Conduct for Space Objects." This document, in compliance with the UN

---

70. The Draft was provided by Russia on June 28, 2007.
74. The proposal was agreed upon on May 22, 2007.
76. Conference on Disarmament, Doc. CFSP/PRES/BER 0986/07.
Charter, proposed that member States should commit to preventing outer space from becoming an area of conflict, including the commitment to resolve any conflict created by space activities by peaceful means. Since the intention of the EU was to create an international instrument, negotiations were then also held with other space-faring States, including China, Russia and the United States.

In a non-paper, the United States reiterated its support of the efforts made to preserve the environment of outer space, and to ensure safe and responsible space operations. However, there was strong opposition to the EU's linkage of TCBMs with the prevention of the weaponization of outer space, or with the establishment of new legal frameworks. So as to accommodate the American perspective, among the proposals then made by the EU was to reduce the CoC to the level of "Best Practice Guidelines," and entirely avoid any reference to UN General Assembly Resolution 61/58.

In direct contrast, China and Russia have continued their support of a treaty-based instrument for the prevention of the weaponization of outer space. On February 12, 2008, China and Russia jointly submitted the draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects ("PPWT"). The proposal included a move to conclude a new international legal instrument with a clear dispute settlement and enforcement mechanism. The response from member States was favorable. The EU member States were also fully in support of the PPWT, with the caveats that definitions for the treaty had to be agreed upon and that an effective and robust verification system should be included as an integral part of the treaty. The EU member States also underlined their continued work on a set of TCBMs, as part of an incremental approach to a treaty that will gain consensus at the CD.

A compromise position was undertaken by the EU member States in the revised version of the draft CoC circulated for endorsement by April 23, 2008. This draft retains the title "Code of Conduct," and clarifies that its objective is to codify "new best practices." The revised draft states that compliance with the existing international agreements should be promoted, including four of the five U.N. outer space

treaties (excepting the 1979 Moon Agreement), the Regulations of the International Telecommunications Union, the Comprehensive Nuclear Test Ban Treaty, the Hague Code of Conduct against Ballistic Missile Proliferation, the Principles relevant to the use of Nuclear Power Sources in Outer Space,80 and the 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.81 Articles relating to space traffic management, space debris control and timely registration of space objects in line with the Registration Convention82 and the Registration resolution83 are also included in the revised draft. However, only the informal dispute settlement mechanisms of consultation and investigation are proposed.

IV. BEYOND THE INITIAL PANIC: INFORMALISM AS A POSITIVE DEVELOPMENT FOR SPACE LAW-PROPOSALS

The foregoing section indicates two evolving perspectives of international lawmaking in the field of space activities: the first, an initiative from the technicians and engineers involved in the field; and the second, launched by the legal and policy experts. In both cases, the use of informalism in creating new standards of best practices and codes of conduct is a clear break with the traditional method of formal treaty-making between State delegations.

The many concerns of highly qualified publicists, with regard to the negative effects of informalism and the creation of soft law, do have much merit. The advantages involved in employing the informal method of creating international standards may, however, outweigh these concerns. Whatever the concerns from either camp, it is clear that informal international regulation of space activities is being undertaken in various fora with regard to various topics of contemporary interest.

This may be a positive development. In addition to the involvement of scientific and technical experts in international legal regulation, informalism has been shown to provide a strong impetus for stakeholders to ensure minimum standards in space activities, while maintaining a flexible, progressive framework. Informalism and the creation of soft law appear to be a workable and increasingly utilized

82. United Nations Convention on the Registration of Objects Launched into Outer Space, Nov. 12, 1974, 1023 U.N.T.S. 15. As of January 1, 2008, fifty-one States have ratified the Convention, four have signed it, and a further two have accepted the rights and obligations therein.
method of regulating space activities. Through the passage of U.N. G.A. Resolutions, the drafting of recommended minimum standards by expert practitioners and the proposal of draft codes of international conduct, informalism is clearly the preferred method of present and future regulation of activities in outer space.

However, legal regulation through informal means will only be a positive development if certain rules are set. The establishment of rules for informal rule-making may seem to be a paradox. The establishment of these rules is intended to ensure coherence and consistency in standard creating, thereby guaranteeing a "hardening" of the soft regulations created. This is especially significant insofar as informalism is seen as the first step towards the development of a hard, binding international legal framework.

The following rules are proposed for the coherent and progressive development of regulations for space activities through informal means:

- **Non-treaty agreements should use treaty language and aim towards creating detailed protocols that supplement a framework convention.**

  The objective of this proposed rule is to ensure that soft law can slowly be "hardened." International environmental law is one field in which a framework treaty is later supplemented with detailed protocols. The framework treaty provides the legal structure with basic principles and a general aim towards future cooperation between parties and also sets out the implementation and dispute settlement mechanisms. The subsequent protocols then establish, in detail, the specific regulations required. This allows the parties to adapt easily to technical and scientific developments, as well as to changes in circumstances in the field. With regard to activities in outer space in particular, this would be especially necessary to incorporate scientific and technical know-how into the legal framework, as well as to ensure flexibility to remain relevant in the face of rapid evolution in technology.

- **Both States and non-State actors should be given standing to accede to the agreement.**

  The globalization of activities, especially those relating to outer space, brings with it a plethora of various actors that are instrumental in ensuring the implementation of international regulation. The shift in paradigm from the original State-centric perspective of interna-

84. For an excellent discourse on rule-making by networks of professionals, see Andrea Bianchi, *Globalization of Human Rights: The Role of Non-State Actors, in Global Law Without a State* 197 (Gunther Teubner, ed. 1997).
85. Examples of this include the 1985 Vienna Convention for the Protection of the Ozone Layer, the 1992 Framework Convention on Climate Change and the 1992 Convention on Biodiversity.
tional law must change to accommodate the various stakeholders involved. Individuals, multi-national corporations, non- and inter-governmental organizations and expert professional associations join the traditional State actors in contributing to, and benefiting from, space activities. Therefore, to ensure that all stakeholders and beneficiaries can participate in the regulation of space activities, it is necessary to widen the scope of *locus standi*, so as to allow these actors to meaningfully participate in the regulatory processes of international space law.

- *Iterations of non-treaty agreements should build upon the last-agreed text.*

Soft law has had a history of being deliberately used as a tool by non-State actors to turn the tide of international inclination when States do not appear willing to enter into a treaty. A good example of this is with regard to women's rights. Various experts and non-governmental organizations drafted what would become the U.N. G.A. Declaration on the Elimination of all Forms of Violence against Women in 1993. The Declaration built upon Comment No. 19 of the Committee on the Elimination of Discrimination against Women, and was consistent with the Vienna Programme of Action and the Beijing Platform for Action. While all four documents are technically not binding, they successfully brought women's rights to prominence on the international level.86 What is significant is that these documents progressively built upon the last-agreed text. This reduces the possibility of the fragmentation of the law in that field, and also avoids duplication of work and the resulting waste of time and resources.

V. CONCLUSION: CATCHING THE MONKEY AT THE BLACK-TIE SOIRÉE

Ambient developments in space activities have taken on the agility and unpredictability of a monkey caught at the black-tie soirée of international law-making. In between the panic caused and the upset social norms of the international legal community, it may be that the "softly, softly" approach of informalism and non-treaty agreements is the best way to catch that monkey. International space law is by no means the only field of international law that is facing the challenge of dealing with informal regulations. Indeed, informalism may be the way forward in a time where technological, scientific and economic evolution tends to outstrip the pace at which law is formally being made. That said, informalism may only be useful if it manages to address the shortcomings in its own procedures. In particular, it is essential that informal law-making does not fragment the international legal framework for the regulation of space activities. To that end, the

86. See Chinkin, *supra* note 5, at 31.
proposals made in this Article may serve to further the utility of informalism by addressing its disadvantages head-on. With a “softly, softly” approach, perhaps even the monkey may be persuaded to attend the soirée in a tuxedo.