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**Bilateral legal framework agreements governing
international cooperation in outer space***

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Abstract

Over the past decade, NASA has increasingly utilized bilateral legal framework agreements to establish the legal parameters for the conduct of cooperative space missions with the space agencies of other countries. The paper explains from a legal perspective why these framework agreements are both useful, and in some cases necessary. NASA's framework agreements generally contain a core set of legal clauses including liability, intellectual property rights, and the transfer of goods and technical data. Through practice, these clauses are now well recognized throughout the community of space faring nations. Successful conclusion of legal framework agreements facilitates the resolution of legal issues and makes scientific and technical cooperation between the Parties proceed more smoothly. By resolving in advance all of the legal issues that routinely arise when negotiating an international agreement to conduct an activity in outer space, significant time and resources are saved, thereby allowing the space agencies to focus on performing their underlying missions more efficiently and effectively.

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Overview

Over the past decade, attorneys from NASA's Office of the General Counsel have worked on an increasing number of bilateral legal framework agreements to facilitate cooperation in the civil uses of outer space. Working with colleagues from NASA's Office of External Relations, attorneys from the Office of the Legal Adviser of the U.S. State Department, and attorneys from other space agencies and foreign ministries around the globe, NASA has concluded these framework agreements to establish the legal parameters for NASA to conduct cooperative space missions with the space agencies of other countries. The article explains why these agreements are both useful and necessary from a legal perspective, and it outlines the general content of these framework agreements.

Purpose of Legal Framework Agreements

NASA's agreements regarding cooperation in outer space generally contain a number of core legal clauses concerning, *inter alia*, liability, intellectual property rights, and the transfer of goods and technical data. By resolving in advance the myriad legal issues that routinely arise when negotiating an international agreement to conduct an activity in outer space, precious time and resources are saved allowing the space agencies to focus on performing their underlying scientific and technical missions.

Authority to Conclude the Agreement

Authority of NASA to conclude international agreements

NASA may cooperate with other nations and groups of nations in work done pursuant to its organic statute, the National Aeronautics and Space Act.¹ Section 205 of the Space Act authorizes NASA to engage in a program of international cooperation to fulfill its mission. In carrying out these activities, the Space Act specifically provides:

42 USC 2475: International Cooperation Sec. 205: **The Administration**, under the foreign policy guidance of the President, **may engage in a program of international cooperation** in work done pursuant to this Act, and in the peaceful application of the results thereof, **pursuant to agreements** made by the President with the advice and consent of the Senate. (emphasis added)

An accompanying signing statement by President Eisenhower on July 29, 1958, underscored NASA's authority to conclude international executive agreements on behalf of the United States: "I regard this section merely as recognizing that international treaties may be made in this field, and as not precluding, in appropriate cases, less formal arrangements for cooperation. To construe the section otherwise would raise substantial constitutional questions." Since NASA's founding 50 years ago, NASA and the State Department have consistently interpreted and applied this provision to require

¹ The National Aeronautics and Space Act of 1958, Pub. L. No 85-568, 72 Stat. 426-438 (Jul. 29, 1958), as amended, 42 U.S.C. § 2451 *et seq.*, hereinafter "the Space Act."

“legally binding agreements.”² President Eisenhower’s reference to “less formal arrangements for cooperation,” refers to international arrangements less formal than Treaties requiring the advice and consent of the Senate, yet which are, nevertheless, legally binding agreements.³ In U.S. parlance, these “less formal arrangements for cooperation” are known as “executive agreements,”⁴ and under the Case Act, executive agreements must be notified to the Congress within 60 days of their entry into force.⁵

Authority of other space agencies to conclude international agreements

NASA’s legal framework agreements establish the legal provisions under which future cooperative activity could take place. Generally, such agreements are structured in one of two ways, contingent on the legal authority of *the other Party*. NASA, with the assistance of the State Department, must ascertain

² Parallel NASA authority to conduct activities with U.S. entities through binding agreements under U.S. law is found in Section 203(c)(5) of the Space Act, which states that, in the performance of its functions, NASA is authorized: “to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary in the conduct of its work and on such terms as it may deem appropriate, with any agency or instrumentality of the United States, or with any State Territory, or possession, or with any political subdivision thereof, or with any person, firm, association, corporation, or educational institution.”

³ *Youngstown Sheet & Tube Co. et al v. Sawyer*, 343 U.S. 579; 72 S. Ct. 863 (1952), concurring opinion of Frankfurter, J.

⁴ For a discussion of U.S. practice with executive agreements, see ANTHONY AUST, *MODERN TREATY LAW AND PRACTICE*, 157-158 (2002).

⁵ See generally, 22 U.S.C. § 2656d, the Case Act, 1 U.S.C. 112a, 112b, and regulations implementing the Case Act, 22 CFR Part 181.

what entity is the appropriate contracting Party to conclude the agreement. NASA conducts international cooperative activities pursuant to binding agreements under international law. A fundamental question NASA regularly encounters is whether the other prospective Party to the agreement has the juridical capacity to sign agreements that are binding under international law. Certain countries’ space agencies apparently have such authority. For example, the German Space Agency (Das Deutsche Zentrum für Luft- und Raumfahrt (DLR)) and the Russian Federal Space Agency (Roscosmos) have such legal capacity. International agreements between NASA and DLR or between NASA and Roscosmos can be concluded readily by NASA, subject to consultation with the Secretary of State.⁶

In other countries, space agencies sometimes do not have the authority to conclude agreements that are legally binding under international law. In such cases, in order for NASA to ensure that its framework agreement is legally binding under international law, such agreements generally must be concluded by the foreign ministry of the other country. The U.S. Government can accomplish this in two basic ways. One way is for NASA to request that the State Department conclude the legal framework agreement on a Government-to-Government level. The other option involves NASA requesting the State Department to exchange Diplomatic Notes with the corresponding Ministry of Foreign Affairs (or other appropriate Ministry) of the other country authorizing the cooperation described in the underlying agency-agency legal framework agreement. In this

⁶ *Ibid.*

circumstance, the international agreement is not the underlying legal framework agreement itself, but rather is found in the exchange of diplomatic notes.

Contents of Legal Framework Agreements

Preamble

Most legal framework arrangements for civil cooperation in outer space are structured similarly. They often start with a Preamble, in which the countries or the space agencies recall successful cooperation that they have shared in the past. For example, a few illustrative preambular paragraphs of the U.S.-Canada legal framework agreement are as follows:⁷

Recognizing a mutual interest in the exploration and use of outer space for peaceful purposes; Considering the desirability of enhanced cooperation between the Parties in human space flight, space science and exploration, Earth science, civil aeronautics research and other activities; ... [and] Recalling their long and fruitful cooperation since 1959 in the exploration and peaceful use of outer space, through the successful implementation of cooperative activities in a broad range of space science and applications areas; ...

The Preamble will customarily conclude with a closing similar to: “the Parties have agreed as follows...” (then setting forth the substance of the Agreement).

⁷ The Framework Agreement between the Government of the United States of America and the Government of Canada for Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes is currently under review by the Government of Canada and has not yet entered into force, although the Parties reached *ad referendum* agreement on the text in April, 2007.

Purpose and Scope

The Preamble may be followed by a “Purpose” article explaining that the Parties wish to establish a legal framework to govern the terms and conditions for their future cooperation. After the Purpose, when needed, agreements contain an article with any necessary definitions of specific terms for the agreement. Following that, one finds the Scope article explaining the broad range of activities covered by the agreement.

Implementing Agencies

When the agreement is a Government-to-Government agreement, it usually contains an article explaining that NASA would be the “Implementing Agency” on behalf of the United States, and the foreign country’s space agency would be the Implementing Agency for that country. What does the Implementing Agency implement? Specifically, the Government-to-Government framework agreement establishes the general legal structure for the cooperation, while Implementing Arrangements concluded under the Government-to-Government agreement set forth the specific roles and commitments of the space agencies to conduct missions in outer space (or in air space, or on Earth, as appropriate). Generally, the Implementing Arrangements refer to and are subject to the legal framework agreement, and should there be any inconsistency between the Implementing Arrangements and the framework agreement, then the framework agreement prevails.

Financial Arrangements

NASA's legal framework agreements customarily contain a clause on Financial Arrangements generally stating that the obligations of the parties (or Implementing Agencies in the case of a Government-to-Government agreement) are subject to the availability of appropriated funds, and that if one party should encounter budgetary difficulties that may affect its performance under the agreement, then it would consult with the other as soon as possible.

Customs Duties and Taxes

NASA has special legal authority to exempt from customs duties and taxes articles that are used in international space cooperative activities.⁸ Thus, legal

⁸ In order to encourage and facilitate the use of NASA's launch services for the exploration and use of space, section 116 of Public Law 97-446 provided for the duty-free entry into the United States of certain articles imported by NASA for its space-related activities or articles imported by another person or entity for the purpose of meeting its obligations under a launch services agreement with NASA. This exemption from duty was provided for in Subheading 9808.00.80, Harmonized Tariff Schedule of the United States (HTSUS) (19 U.S.C. 1202). Also, HTSUS, Chapter VIII, U.S. note 1, pursuant to the same law, provided that return of articles by NASA from space to the United States would not be considered an importation, and similarly not be subject to a duty. As a result of the Uruguay Round agreements of the 1994 General Agreement on Tariffs and Trade, this authority was revised and expanded in scope. It now provides that imports of articles for NASA's use and articles imported to implement NASA's international programs, including articles to be launched into space, parts thereof, ground support equipment, and uniquely associated equipment for use in connection with NASA's international programs and launch service agreements would be eligible for duty-free customs entry upon certification by NASA to the Commissioner of

framework agreements routinely contain a clause obliging the other party to waive customs duties and taxes if they have authority to do so, or to pay those duties or taxes should they be imposed.

Intellectual Property

Intellectual property (IP) rights are also typically addressed in a legal framework agreement. In short, patents, trademarks, and copyrights are all covered. Generally speaking, any IP created by one party before or outside the scope of the agreement belongs to that party; allocation of any IP rights solely created by one party or its contractors during the course of the implementation of the agreement is determined by that party's national laws. For any IP jointly created

Customs. The revised authorities also provided, in U.S. note 1 to subchapter VIII of chapter 98 of the HTSUS, that articles brought into the customs territory of the United States by NASA from space or from a foreign country as part of a NASA's international programs would not be considered imports or subject to customs entry requirements. The provision of the HTSUS: 9808.00.80 00 lists the following in a table annotating their rate of duty as "free:"

Articles for the National Aeronautics and Space Administration and articles imported to implement international programs between the National Aeronautics and Space Administration and foreign entities, including launch services agreements; Goods certified by it to the Commissioner of Customs to be imported for the use of the National Aeronautics and Space Administration or for the implementation of an international program of the National Aeronautics and Space Administration, including articles to be launched into space and parts thereof, ground support equipment and uniquely associated equipment for use in connection with an international program of the National Aeronautics and Space Administration, including launch services agreements.

during performance of the agreement (which is relatively unusual), the parties would be obliged to consult to determine: the allocation of rights to, or interest in, such joint invention; the responsibilities, costs, and actions to be taken to establish and maintain patents or other forms of protection for each joint invention; and the terms and conditions of any license or other rights to be exchanged between the parties or granted by one party to the other.

Transfer of Goods and Technical Data

NASA is committed to compliance with export control laws, including the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR).⁹ For this reason, NASA's legal framework agreements routinely contain a clause concerning the transfer of goods and technical data. While the specific clause is very detailed, it essentially states a few fundamental principles: that only those technical data and export-controlled goods necessary to fulfill the agreement are transferred; and that, in performance of the agreement, the Parties will follow all applicable laws and regulations, particularly those concerning

⁹ The U.S. Department of Commerce controls exports of dual-use commodities, software, and technologies, and administers the Export Administration Act of 1979, as amended (EAA, 50 U.S.C. app. 2401 et seq.), through its Export Administration Regulations (EAR, 15 CFR 730-774). The U.S. Department of State has responsibility for the control of the permanent and temporary export and temporary import of defense articles and services, governed by section 38 of the Arms Export Control Act (AECA, 22 U.S.C. 2778) and Executive Order 11958, as amended. The AECA, among these other requirements and authorities, provides for the promulgation of implementing regulations, the International Traffic in Arms Regulations (ITAR, 22 CFR 120-130).

export control and control of classified information. Additionally, the clauses provide that if export-controlled goods or data are transferred, they must be marked appropriately, and that such goods and data are to be used solely for purposes of fulfilling that Party's responsibilities under the agreement, and then either returned or destroyed.

Cross-Waiver of Liability

NASA's liability provisions are extremely complex and they contain precise definitions.¹⁰ Nevertheless, they are well recognized over decades of practice as the standard of risk allocation for cooperative space activities throughout the globe. Succinctly stated, the fundamental principle of NASA's liability article states that each Party assumes its own risks inherent in the cooperative activity. The article contains a mutual promise by both Parties not to sue each other for losses caused by any of the activities that take place under the agreement, subject to a few exceptions. The article also requires that each Party flow this cross-waiver of claims down to any "related entities" to ensure that they also waive claims against the other Party and the other Party's related entities. With each entity assuming its own risks under the agreement, the clause functions to encourage the collaborative exploration of outer space by lowering the costs of cooperation by reducing the risk of exposure to liability. Sec. 309 of the Space Act confirms and clarifies NASA's authority to waive claims of the U.S. Government in cooperative

¹⁰ A detailed discussion of the changes NASA recently made to 14 CFR Part 1266 (NASA's cross-waiver clauses for international cooperative agreements) is found at 73 FR 10143 (February 26, 2008).

agreements in exchange for a reciprocal waiver of claims from the foreign cooperating party. Since NASA's waiver of claims includes waiving claims of other U.S. Government agencies, NASA looks to its partner space agencies (or their governments) to ensure that the scope of their waiver is reciprocal.

Amicable Settlement of Disputes

NASA's legal framework agreements also contain provisions on dispute settlement. These provisions state unequivocally that the parties will resolve disputes through negotiations and consultations. NASA aims to resolve disputes at the lowest possible technical level – for example at the level of the program managers. Failing that, disputes can be resolved at a higher managerial level, such as at the level of the Associate Administrator. Only in rare cases would a dispute be elevated as high as the NASA Administrator or his designee for joint resolution.

Final Clauses

NASA's legal framework agreements conclude with relatively standard final clauses, generally comprising the procedures for amendments, entry into force, duration, and termination of the Agreement.¹¹

¹¹ Final clauses “owe their designation as *final clauses* not merely to the fact that they are normally placed at the end of a treaty but to the fact that they cannot be negotiated until work on the substantive provisions of the treaty itself is essentially completed.” Shabtai Rosenne, *When is a Final Clause Not a Final Clause*, 98 Am.J.Intl.L.546.

Conclusion

As of the date of this paper, NASA has concluded ten of these bilateral legal framework agreements for cooperation in outer space either at the space agency level or at the Government-to-Government level.¹² At the agency level, NASA has concluded legal framework agreements with the space agencies of Argentina, India, and Israel. At the Governmental level, framework agreements have been concluded with: Brazil, France, Hungary, Norway, Russia, Sweden, and Ukraine. In fact, NASA's agreement with the Ukraine was signed on March 31, 2008, during the visit of President Bush and Secretary of State Rice to Kiev.

Each of NASA's legal framework agreements has varying levels of detail and the scope can sometimes vary.¹³ Nevertheless, successful conclusion of a framework agreement establishing the legal regime for potential cooperation between space agencies has proven to facilitate scientific and technical cooperation in a variety of areas, often on an expedited basis. By resolving legal

¹² Not all of these agreements remain in force. Some have expired by virtue of their own terms.

¹³ For example, the U.S. concluded an agreement with Japan in 1995 solely in the area of cross-waiver of liability. See the Agreement between the Government of the United States of America and the Government of Japan Concerning Cross-Waiver of Liability for Cooperation in the Exploration and Use of Space for Peaceful Purposes, signed at Washington, on April 24, 1995, as amended, and the Exchange of Notes of the same date between the two Governments concerning subrogated claims. Less formally, however, there have been preliminary discussions between NASA and the Japan Aerospace Exploration Agency concerning the possibility of a more comprehensive framework agreement on civil space cooperation between the U.S. and Japan.

questions in advance, NASA and its partner space agencies around the globe can focus their attention on what they do best: exploring the universe, understanding our own planet, and inspiring the next generation of explorers.