Part V

Commercial aspects of space law
Introduction

Space activities are no longer a field monopolized only by States; more and more private entities and individuals show great interest and many have already set their feet in the field. The participation of private entities no doubt adds to the complexity in the regulatory regime for such activities, especially with regard to the civil and commercial aspects of the legal regime. Intellectual property protection is one major issue requiring serious consideration. It offers private entities the exclusive right to use and profit from the use of their own inventions and creations. Through years of development, a complete set of rules has already been put in place to provide a transparent regime for intellectual property protection; however, it is not clear whether these rules apply to activities conducted in outer space, where no State can claim sovereignty. This situation is not conducive to the development of space activities and the participation of private entities, as one of their major concerns would be the possibility to retrieve profits from their investments and contribution to space activities. Consequently, a timely discussion and clarification on either the possible application of the existing intellectual property rules to outer space or the necessity of separate rules for space activities is extremely important and beneficial for the continued involvement of private entities in the field.

One fundamental issue arises from the important concepts of “for benefit and in the interests of all countries” and “province of all mankind” defined in the Outer Space Treaty. One may argue on this basis that the inventions and economic returns cannot be monopolized by the State or entity carrying out the space activities. However, this has been widely considered to be detrimental to the development of space technologies and activities; without fair economic returns, no States or entities would be interested in the potentially exorbitant and risky investment in outer space. Accordingly, the intellectual property regime is necessary for space activities; the issue of licensing on fair and reasonable terms to other States or entities could be

* Part of this chapter derives from the article “Intellectual Property (IP) Protection in Outer Space” by Yun Zhao, to be published in Queen Mary Journal of Intellectual Property, Volume 6.

1 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies [Outer Space Treaty], 27 January 1967, 610 UNTS 205, art I.
negotiated at a later stage between parties. In the end, an appropriate intellectual property regime should be able to encourage invention and competition; for this purpose, “an optimum balance is needed between the interests of the inventor, the State concerned, and those who improve space technology.”

Reconciling territoriality of IPR with non-Territoriality in outer space

Intellectual property rights are essentially territorial in nature; the protection offered is limited to a specific geographical area where they are registered for a certain period of time. The territorial nature drastically differs from the non-territorial nature of space law. As defined in the Outer Space Treaty, outer space is free from national appropriation; no States can claim national sovereignty over any part of outer space, either by means of use or occupation or by any other means. States are barred from exercising their territorial jurisdiction, control and authority over outer space.

The protection of intellectual property rights relies on State enforcement; outer space, however, lacks the concept of State sovereignty. Thus, the protection of intellectual property rights in outer space requires special consideration. While non-appropriation of outer space has been widely accepted by the international society, we cannot miss another provision in the same treaty that the activities of the non-governmental entities shall require the authorization and continuing supervision by an appropriate State. The treaty further provides that the State of registry has jurisdiction and control over space objects as well as personnel launched into outer space. The act of registration entails important legal implications by assuming jurisdiction and control over the space object and the personnel therein in outer space.

The Registration Convention further develops the responsibility provision in the Outer Space Treaty and elaborates on the arrangement for the international registration of space objects. Several elements deserve attention here. A State of registry must be a launching State which launches or procures the launching of a space object, or a State from whose territory or facility a space object is launched. In case there are two or more launching States, they should jointly determine which one should register the space object. Such a State of registry shall be the one that maintains jurisdiction and control over the space object under the Outer Space Treaty. As such, while the non-appropriation principle applies, the space law regime provides relevant connections between the State of registry and the space object, and the space activities carried out in the space object. This would be one important and useful arrangement for the current discussion, especially in considering possible reconciliation of the space law regime with the intellectual property law regime.

The Registration Convention provides the opportunity for an international intergovern-

4 Outer Space Treaty, supra note 1, art II.
6 Outer Space Treaty, supra note 1, art VIII.
7 Saragovitz, supra note 2 at 91.
8 Convention on Registration of Objects Launched into Outer Space, 14 January 1975, 1023 UNTS 15, art 1(a).
mental organization to register a space object under certain conditions. This may cause difficulty in the determination of an applicable legal regime for intellectual property protection. In this regard, the member States within an international intergovernmental organization could reach an agreement beforehand in dealing with the issue of intellectual property. Useful reference can be made to the International Space Station Intergovernmental Agreement (ISS IGA) with regard to the arrangements for intellectual property protection within the European Partner States that are represented by the European Space Agency (ESA), which will be discussed further in the next part.

Accordingly, we may make reference to the legal regimes for international space where no States can claim for sovereignty. Obviously, the high seas would be one ideal example for reference. Quasi-extension of national territory has been applied, much like registration of spacecraft under the Outer Space Treaty and Registration Convention, for activities carried out on high seas by vessels holding the registration of that State. This means that the activities carried out in a vessel would be considered to be in the territory of the State where the vessel is registered, and the law of the flag shall apply. The United Nations Convention on the Law of the Sea provides that “every State shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and for the right to fly its flag. Ships have the nationality of the State whose flag they are entitled to fly. There must exist a genuine link between the State and the ship.” This Convention further provides that “every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.”

The nationality standards implemented can create the territorial connecting points for the jurisdiction and control by the State of registry. As such, the territorial connection can be naturally created for the protection of intellectual property rights in outer space for the activities carried out in a spacecraft, which will be considered as territory of the State where the spacecraft is registered. This would be a useful means to resolve the dilemma.

The application of the quasi-extension of national territory requires that space objects be properly registered with a State in accordance with the Registration Convention. However, besides the traditional concerns over the ambiguous definition of “space object”, the application of the Registration Convention faces other challenges in the era of space commercialization, especially in the case of on-orbit transfer of space objects. This issue has been widely discussed in the space law circle, which led to the adoption of a UNGA resolution in 2004.

In case relevant activities are carried out in outer space outside spacecraft, relevant nationality or domicile of the person shall be a starting point to study the protection of intellectual property for certain activities conducted and results achieved by that person. This nationality approach shall apply only when no quasi-territorial connection can be determined.

9 Ibid., art VII.
10 See Manfred Lachs, The Law of Outer Space: An Experience in Contemporary Law Making (Leiden: Sijthoff, 1972) at 70. Lachs observes that “in cases of joint launching, agreement between the parties is required as to which of them is to be deemed the ‘State of Registry’. A similar agreement is also necessary when a launching is carried out by an international organization.”
13 Ibid., art 94(1).
Relevant international legal regime for intellectual property protection

**WIPO regime**

The World Intellectual Property Organization (WIPO) is a specialized international governmental organization under the UN framework responsible for the promotion of the protection of intellectual property throughout the world. The WIPO oversees several important international regimes governing the protection of various types of intellectual property, including patent, trademark, copyright and neighboring rights. It administers around 26 treaties in the field, which are categorized into three groups: intellectual property protection treaties, global protection system treaties, and classification treaties.15

The WIPO Copyright Treaty (WCT) was concluded in the Internet era.16 Accordingly, it contains provisions regarding the protection of computer programs and the compilation of data or other materials. More importantly, the WCT establishes the regime for the broad protection of communication rights, both online and offline.17 As such, signals and relevant data transmitted from a spacecraft in outer space enjoy copyright protection under the WCT.

**TRIPs regime within the WTO**

The establishment of the World Trade Organization (WTO) in 1995 brought major changes to the legal regime for intellectual property protection. Trade related intellectual property protection became one major pillar of the WTO. The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)18 brings in all major international treaties in the field, reflecting “a synergy between States in the establishment of a uniform regime that would harmonize intellectual property rights within member states of WTO.”19 However, the members are free to individually decide on the appropriate methods to implement their commitments under the TRIPs within their own legal system and practice.20

The TRIPs defines the following as its main principles: minimum levels of protection; effective procedures and remedies for enforcing intellectual property rights; non-discrimination (national and most-favored-nation treatment); and enforcement through WTO dispute settlement.21

Similar to the treaties mentioned above, the TRIPs does not address the issue of intellectual property protection in outer space. But to a certain extent, however this agreement expresses similar consideration as the Outer Space Treaty that space exploration shall be for the benefit of all mankind, by providing that “In order to facilitate the implementation of this agreement, developed country members shall provide, on request, and on mutually agreed terms and conditions, technical and financial cooperation in favor of developing and least developed country members.”22

16 *The WIPO Copyright Treaty (WCT)*, 12 April 1997, WIPO Doc. CRNR/DC/94.
17 Ibid., art 8.
19 Abeyratne, *supra* note 3 at 92.
20 *TRIPs*, *supra* note 18, art 1(1).
22 *TRIPs*, *supra* note 18, art 67.
It would be interesting to note that the agreement provides that the location of invention shall not affect the patent rights, which directly leads to the deduction that inventions arising from space activities shall similarly enjoy patent protection. WTO Members shall not discriminate on the patentability of an invention, no matter whether a first-to-file system or a first-to-invent system is adopted in a particular State. So within a domestic legal regime, a State should make sure that patent protection shall not be refused simply because of the location of the invention in outer space.

**Selected bilateral and multilateral legal regimes for IP protection**

International space cooperation is one fundamental principle defined in the Outer Space Treaty. The States are free to adopt any mechanisms to carry out space cooperation, the conclusion of bilateral and multilateral agreements being one major mechanism for the purpose of space cooperation. It would be important to examine the arrangements of the existing major agreements in the field of intellectual property protection. It would be impossible to examine all existing agreements; therefore two agreements are selected for illustration below.

The Intergovernmental Agreement (IGA) for the International Space Station (ISS) in 1998 is the first and most successful multilateral agreement for conducting a cooperative space project. The arrangements in the IGA provide a successful example for space cooperation in the field of intellectual property protection. The IGA is the only international agreement providing clear wording on intellectual property protection, with one long provision devoted for this purpose. It adopts the quasi-territorial approach by providing that an activity occurring in or on an ISS flight element should be deemed to have occurred only in the territory of the Partner State of that element's registry. The IGA further defines the application of relevant national intellectual property law to such an activity. As such, the relevant domestic legal regime shall govern the creation, use and transfer of intellectual property. The same approach has also been retained and applied for the issue of criminal jurisdiction.

However, the temporary presence in the territory of a Partner State of an article, including the components of flight elements, in transit between any place on Earth and any flight element of the Space Station registered by another Partner State or the European Space Agency (ESA) should not in itself form the basis for any patent infringement proceedings in the first Partner State.

Despite the adoption of the quasi-territorial approach, a Partner State shall not apply its own laws on secrecy of inventions to prevent a person who is not its national or resident from filing a patent application in any other Partner State that provides for the protection of the secrecy of patent applications containing information that is classified or otherwise protected for national security purposes. This arrangement is different from normal practice in that it requires an inventor to apply for patent protection in the State where the inventor is a resident.

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23 *TRIPS, supra* note 18, art 27(1).
25 *ISS IGA, supra* note 11, art 21(2).
26 Ibid.
28 *ISS IGA, supra* note 11, art 21(3).
or where the invention is made. This special arrangement is understandable for the purpose of international cooperation among Partner States in such a large cooperative project.

As far as the European Partner States are concerned, since the ESA is delegated to register the ESA flight elements, any European Partner State may deem relevant activity to have occurred within its territory for ESA registered elements. For the purpose of enforcement, a person or entity could bring proceedings and obtain compensation only in one State even if the intellectual property is protected in more than one European Partner State. To prevent possible multiple proceedings against the same act of infringement by two or more persons or entities, the IGA provides that a court may grant a temporary stay of proceedings for actions filed later pending the outcome of the earlier action; it further provides that satisfaction of an earlier action shall bar any pending or future actions based on the same act of infringement.

In case of licensing, the effect of a license under the law of any one European Partner State shall not be refused recognition in any other European Partner States. Such an arrangement is based on the existing framework of the ESA and helps to promote further cooperation among the Member States of the ESA. One space lawyer raised an issue regarding the difficulty with intellectual property enforcement caused by the legal privileges and immunities endowed upon the ESA and its staff members by the ESA Convention. The enforcement of intellectual property is a practical issue. We may overcome the technical difficulty caused by the existence of privilege and immunity by referring to the existing systems of compulsory licensing and fair use.

A provision establishing cross-waivers of liability is inserted in the IGA for the purpose of closer cooperation among the Partner States. However, this provision shall not apply to intellectual property claims. Accordingly, any intellectual property claims arising out this cooperative project does not need to be waived between and among the Partner States, which partly demonstrates the importance of intellectual property issue in spite of the essential nature of cooperation in the ISS project.

It can be seen from the above examples that the existing agreements do not intend to go into basic concepts of intellectual property rights; instead they focus more on the procedural aspects of how to prevent infringements of existing property rights and protect the exclusive rights of the original right owners. Consequently, we can deduce from the above arrangement that the existing substantive and procedural arrangement would similarly apply to the protection of intellectual property rights in outer space. With regard to outer space, we will focus on how to promote space cooperation in the field and how to correlate the connecting points in outer space to satisfy the geographical feature of traditional regimes for intellectual property protection.

**Domestic legal regimes for intellectual property protection**

**Protection of industrial property rights**

As discussed earlier, several international regimes have been set up to deal with industrial property rights. However, the domestic regimes for the protection of industrial property rights

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29 Ibid., art 21(2).
30 Ibid., art 21(4).
31 Ibid., art 21(4).
33 **ISS IGA, supra note 11, art 16(3)(d)(4).**
are far from harmonized. This can be well exemplified by the co-existence of the first-to-file and first-to-invent regimes in different countries for patent protection. The United States adopts the first-to-invent system, while many other States adopt the first-to-file system.\(^{34}\) National regimes also differ in the determination of patentability, namely, the understanding of novelty, inventive step (non-obviousness) and industrial applicability (utility).\(^{35}\)

Furthermore, if actual reduction to practice happened on a US-controlled space object in outer space, “it would be as-if it was an actual reduction to practice within the US.”\(^{36}\) As such, it is clear that a quasi-territorial approach has been adopted by the United States for the protection of inventions in outer space. It is to be noted that the United States also uses registration, not launching, as a connecting factor in determining the element of jurisdiction and control.\(^{37}\)

Even before the above provision was enacted, case law in the United States also confirmed the possible extra-territorial reach of U.S. patent law to space activities. The judge in \textit{Decca Limited v. United States} justified the application of the U.S. patent law taking into consideration of the three factors: ownership of the equipment, control of the equipment and the actual beneficial use of the system within the United States.\(^{38}\) The first two factors have been again cited in the \textit{NTP v. Research Motion} case.\(^{39}\) The court has taken further opportunities to analyze what constitutes “within the United States” in the \textit{Hughes Aircraft Co. v. United States} case\(^{40}\) through the examination of the existence of a direct control point in the United States. As Smith correctly observes, “No appropriation of any area is necessary by a granting State to enforce patent rights in favor of an individual. Rather, what is required is the ability to control conduct of individuals; this can be facilitated through the exercise of jurisdiction over the space object on which their activities are based.”\(^{41}\)

Nevertheless, the law provides two exceptions for its application, even if the United States is in control of the space object. The U.S. patent law shall not apply to the space object if it is specifically identified and otherwise provided for by an international agreement to which the United States is a party,\(^{42}\) or if it is carried on the registry of another State in accordance with the Registration Convention.\(^{43}\)

At the current stage, many States carry out space activities to conduct experiments and

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\(^{35}\) \textit{TRIPS, supra} note 18, art 27.1.


\(^{38}\) \textit{Decca Limited v. United States}, 210 Ct Cl 546 at 552–553, 544 (Ct Cl 1976).


scientific research. While States may have different ways to define and understand the meaning of scientific research and experiments, these activities generally fall within the area of either fair use or compulsory licensing in the patent regime. The continued application of fair use and compulsory licensing in the space field is important in encouraging relevant entities to carry out space exploratory work for further advancement of space technologies.

There is yet another concern regarding a possible barrier created by patent for further development of subsequent research and space activities. For example, patenting technologies that would cover a system or method of satellite communication using certain useful orbits may in effect limit the access to these orbits by other parties.44 In this regard, we may again consider the application of compulsory licensing to balance the exclusive rights of the owner and public interests. Many States may even go further to define certain inventions that are necessary for the protection of public order or morality that are therefore not patentable. This provision is also specifically allowable under TRIPs.45

Copyright protection and other intellectual property rights

Among all types of intellectual property rights, copyright protection has the lowest standards of originality. The Berne Convention and the WCT have harmonized very well the legal regime for copyright protection. The substantive requirements for copyright protection are almost the same around the world, though the threshold of originality may differ from State to State. It has been well accepted that copyright and data rights can be applied to protect relevant data and materials in the space field.46

It is also simplified because the nationality of the author defines the legal regime for copyright protection. Only in case of non-protected authors will the place of first publication play a role in determining the applicable legal regime. One would thus only need to examine the application of the current copyright protection regime for several types of materials arising out of space activities.

Direct broadcasting services (DBS) create programs which no doubt enjoy copyright protection. Remote sensing, together with satellite imagery, has been widely used in our daily lives in the fields of Earth observation, disaster mitigation and management, weather broadcasting, mining, and so on. Copyright protection for remote sensing data has been one major issue for consideration. Under the 1996 UNGA resolution on remote sensing,47 remote sensing data are differentiated into three levels: primary data, processed data and analyzed data.48
Similarly, the United States and Canada differentiate remote sensing data by the level of processing from raw data to remote sensing product.\(^49\) The Russian Resolution on the Order of Acquisition, Use and Provision of Geo-Spatial Information, however, defines all data as “primary data” under the above UNGA resolution.\(^50\)

There is no problem in finding that processed data and analyzed data enjoy copyright protection. However, when it comes to primary data, it would be difficult to argue for copyright protection.\(^51\) Fortunately, we note that some States have extended intellectual property protection through a *sui generis* regime.\(^52\) A database right was created and granted to the owner, forbidding unauthorized extraction or re-utilization of all or a substantial part of the database contents.\(^53\) This was implemented in European countries, such as the United Kingdom.\(^54\) As long as there is a substantial investment in obtaining, verifying or presenting the contents of the database, the owner of the database shall enjoy a property right in the database, no matter whether the database or any of its contents is a copyrighted work.\(^55\)

The Copyright Act in the United States sets up a statutory copyright license for the distribution of point-to-multipoint television station signals over DBS through the payment of copyright fees to the programming copyright owners.\(^56\)

Aside from the above traditional categories of intellectual property rights, we should also note other special types of products for intellectual property protection. Integrated circuits are important for the functioning of spacecraft, vehicles and facilities. Due to the special environment in outer space, scientific experiments often lead to the production of new plant species. This is another area of intellectual property rights worthy of attention. In this regard, many States have already formed their own legal regimes for the protection of integrated circuits and new plant species.

**Legal controls over transfer of space technology**

*The role of export controls in international trade regime*

Advanced space technologies are indispensible for space exploratory activities. These space technologies are normally considered to be highly sensitive and relevant to national security.


\(^{52}\) For example, the Council of the European Union passed Directive No. 96/9/EC of 11 March 1996 on the legal protection of databases, which introduced separate legal rights for certain computer records, known as database rights.


\(^{55}\) UK Databases Regulations, *supra* note 54; UK Copyright Act, *supra* note 54.

Thus, international community has already reached consensus on the necessity of export controls over some space technologies and products. In the trade area, States adopt various measures, including licensing and quotas, to control the export of certain products and technologies. Such measures can similarly apply to the space field.

To facilitate international cooperation in the space field, however, States have reached some consensus on the transfer of technical data and goods. The IGA provides an obvious example in this regard. Technical data and goods for transfer are limited to those that are “considered to be necessary to fulfill the responsibilities of that Partner’s Cooperating Agency under the relevant MOUs and implementing arrangements.” The Partners shall encourage and facilitate the expeditious transfer of these technical data and goods.

However, even under such a cooperative framework, national laws or regulations must be strictly followed, including those regarding export controls. The IGA further sets restrictions that may be identified by the furnishing Cooperating Agency, which may mark with a notice or otherwise specifically identify the technical data or goods to be protected for the purposes of export control, proprietary rights, or national security. Other Partner States shall take appropriate measures “to prevent unauthorized use, disclosure, or retransfer of, or unauthorized access to, such technical data or goods.”

Similar arrangements can also be found in the APSCO Convention. The Member States shall reach agreements on technology safeguarding measures to prevent “any unauthorized access to protected information, items and related technologies.” Furthermore, Member States shall respect national export control laws and regulations.

**International and national export control regimes**

Due to the high sensitivity of space products and technologies, the international community has formed different export control regimes to deal with different types of products and technologies. The 1996 Wassenaar Arrangement coordinates national regulations and policies on export controls for conventional weapons and sensitive dual-use goods and technologies. It serves as “an export control transparency arrangement.” The Missile Technology Control Regime (MTCR) established an international regime for export controls over missiles and missile-related products and technologies. As a supplement to the MTCR, the International Code of Conduct against Ballistic Missile Proliferation (Hague Code of Conduct) was concluded with the aim to curb ballistic missile proliferation worldwide.

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57 *ISS IGA*, supra note 11, art 19(1).
58 Ibid., art 19(2).
59 Ibid., art 19(3).
60 Ibid., art 19(4).
62 Ibid., art 23(3).
Along with the above international export control regimes, States have also established their own national legal regimes for export controls. The United States has formulated a complete set of rules for export controls, including the 1917 Trading with the Enemy Act, the 1946 Atomic Energy Act, the 1949 Export Control Act, the 1951 Mutual Defense Assistance Control Act, the 1969 Export Administration Act, and the 1976 Arms Export Control Act.\(^{67}\) Necessary export control measures may be taken under the consideration of national security, foreign policy and short supply.\(^{68}\) The Export Administration Regulations list commodities, software and technologies and nations that are subject to export controls.\(^{69}\) A “presumption of approval” for export license is adopted under the Export Administration Regulations.\(^{70}\) “Goods” are defined as “any article, natural or manmade substance, material, supply or manufactured product, including inspection and test equipment, and excluding technical data.”\(^{71}\) “Technology” is defined as

the information and know-how (whether in tangible form, such as models, prototypes, drawings, sketches, diagrams, blueprints, or manuals, or intangible form, such as training or technical services) that can be used to design, produce, manufacture, utilize, or reconstruct goods, including computer software and technological data, but not the goods themselves.\(^{72}\)

The Directorate of Defense Trade Controls (DDTC) is the entity within the Department of State in charge of the issuance of export licenses for defense articles and defense services under the International Traffic in Arms Regulations (ITAR).\(^{73}\) The U.S. Munition List provides the details of defense articles and defense services subject to export controls, with spacecraft (including communications satellites) included in its Category XV.\(^{74}\)

The Export and Import Permits Act (EIPA),\(^{75}\) together with Export Permits Regulations and Import Permits Regulations,\(^{76}\) is the major legislation in Canada dealing with export controls and transfer of technologies and goods. In accordance with the EIPA, the Canadian government issues an Export Control List (ECL) and an Area Control List (ACL), providing detailed lists of technologies, goods and countries for export controls through the issuance of permits.\(^{77}\)

The Foreign Trade Law in China sets up a legal regime for export controls, which is further concretized in other regulations for specific types of technologies and goods. The Regulations

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\(^{70}\) 50 USC § 2403(d) (2009).

\(^{71}\) 50 USC § 2415(3) (2009).

\(^{72}\) 50 USC § 2415(4) (2009).

\(^{73}\) 22 CFR Parts 120–130 (2004).


\(^{75}\) Export and Import Permits Act, Canada, RSC E-19 (1985).

\(^{76}\) Export Permits Regulations, Canada, SOR/97-204 and Import Permits Regulations, Canada, SOR/79-5.

\(^{77}\) Export and Import Permits Act, supra note 75, s 7(1).
Conclusion

The WIPO provides two reasons for the necessity of intellectual property protection, that is, “to give statutory expression to the moral and economic rights of creators in their creations and such rights of the public in access those creations” and “to promote, as a deliberate act of Government policy, creativity and the dissemination and application of its results and to encourage fair trading which could contribute to economic and social development.” These two reasons also apply to the protection of intellectual property in outer space.

The privatization and commercialization of outer space calls for an appropriate legal regime for the protection of the highly sophisticated space technologies and data arising from space activities. Without clear and strong protection for intellectual property rights, private entities will be hesitant and in the end likely lose interest in investing in space activities.

While the current intellectual property regime shall continue to apply to any scientific and research results, we will need to find ways to reconcile the territorial intellectual property protection regime and the non-territorial outer space regime. Only with sufficient protection for space technologies and data in place will private entities be willing to participate in space activities, which will further stimulate the development of space technologies in general.

The above discussions show that the conflicting features of the two regimes are not irreconcilable. Since the existing regime for intellectual property is relatively mature, we need to create a connecting point linking outer space with the current intellectual property regime. As such, this mission is not impossible. The intellectual property and space principles have been in coexistence before and will continue to be so in the future.

While upholding the principle of international cooperation in the peaceful uses of outer space, we can be optimistic that the States are able to find the appropriate connecting point to extend the current intellectual property regime to outer space and establish an appropriate national regime for the protection of intellectual property, including the regime for the transfer of space technologies. As such, an optimum balance can be reached “between the interests of the inventor, the State concerned, and those who improve space technology.”

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