Private International Law (Conflict of Law Rules) for Human Presence of Long Term in the Space

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The conflict of law issues with regard to space activities has been relatively underexplored. At first sight, it appears that the provision in the Outer Space Treaty (OST) that provides for the exercise of "jurisdiction and control" by the state on whose registry the space object is carried solves the problem easily. However, a closer look at a few hypothetical cases reveals that the issue is not so simple, and that the application of the law of the state of registry does not always lead to a reasonable result. Therefore, a more careful examination is necessary, referring to the general principles of conflict of laws, as well as the discussions on the conflict of laws with regard to the activities on or over the High Seas (namely the maritime and aviation cases of conflict of laws), with due regard to the space law rules generated by, in particular, the United Nations space law treaties.

I. Space Law and the Private International Law

1. Importance of Conflict of Law Rules

The long-term presence of human beings in the space will give rise to increased disputes involving private entities. It may entail various legal issues to which no explicit answers are given by the space law treaties. One of such issues is the problem of conflict of laws.

The conflict of law rules has been relatively unexplored in space law. However, unless substantive rules of private law are largely unified by international conventions, disputes between private entities from different jurisdictions require the determination of the governing law through conflict of law rules.¹

The scope of the analysis of this paper is limited to the case where the parties to a dispute are all private entities. It is anticipated that even when the long-

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P.P.C. Haanappel, The Law and Policy of Air Space and Outer Space, p.97 (Kluwer Law International, 2003).

term presence of human beings in space becomes everyday phenomena, many of the space activities will still be carried out by states or space agencies. Those activities are generally state actions, which are not governed by private law and, therefore, will not entail such problems of conflict of laws as discussed here.

2. Registration of a Space Object and Flag of a Vessel

When considering the conflict of law rules, the unique feature of the outer space is that it is not subject to national appropriation claim by any means (OST, Art II). It means that the outer space is, and will remain forever, the place where no national law exists. Places of the same nature on the globe are the High Seas, the airspace over the High Seas and Antarctica. Many arguments have been made on the conflict of law rules with regard to the maritime activities on the High Seas. When considering the conflict of law problems in the outer space, references to those arguments may be useful.

However, space objects in the outer space differ from ships on the High Seas in some important respects. Space objects are to be registered when launched into outer space, and the state of registry shall retain jurisdiction and control over the registered space object (OST Art VIII). The precise meaning of "jurisdiction" here is not clear, but the general understanding is that it means the power to legislate and enforce laws and rules.² Based on this understanding, some commentators argue that the state of registry is decisive in determining the applicable law.³ However, mere reference to the law of the state of registry will not solve every issue arising out of space activities. For example, suppose two or more space objects, each of which is registered in its launching state, collide into each other in the outer space. In this case, it is not certain which launching state's law should be applicable to resolve the liability issues arising from the collision. Likewise, when space assets are sold and transferred among private entities from different states, it is not necessarily clear whether all of such transactions should be governed by the law of the state of registry, that is, the law of the launching state. In these situations, more than two national laws can be potentially applicable to the same disputes, and the conflict of laws becomes a real issue.

Further, as compared with the flag state of a vessel, the state of registry seems to be less closely connected with the incident involving a space object. Firstly, while a vessel has a flag of one state other than in exceptional cases (such as a vessel of pirates), not all the space objects are registered, despite the requirement under the Registration Convention (RC) that the launching state register the space object launched into Earth orbit or beyond (RC, Art II). In

Schmidt-Tedd / Mick, in: Hobe, Schmidt-Tedd & Schrogl (eds.), Cologne Commentary on Space Law, vol.I, Art VIII OST, para. 48 (Carl Heymanns, 2009).

³ Id. See also, Michael Gerhard & Kamlesh Gungaphul-Brocard, The Impact of National Space Legislation on Space Industry Contracts, in: Lesley Jane Smith & Ingo Baumann (eds.), Contracting for Space, p.64 (Ashgate, 2011).

particular, many states did not register the upper stage of a launcher until recently, and some still do not do so.

Secondly, the registration must be made by the launching state, or one of the launching states, if there are two or more of them (REG Art II, Paras 1 & 2). Even when the space object is transferred from the original owner to a new owner of another state, the registration (at least the registration in the sense of OST and REG) cannot be transferred. It means that the presumption that the state of flag usually has the closest link to the vessel cannot be maintained in the case of the state of registry of a space object.

Thirdly, as opposed to that a vessel is granted the nationality of the state of flag (UNCLOS, Art 91, Para 1), the registration of a space object is understood as not granting the nationality of the state of registry.

3. The Aim of This Paper

Based on the findings outlined above, the conflict of law rules with regard to the disputes arising from space activities may best be argued by, first, referring to the arguments with regard to the maritime activities on the High Seas (and the private air law for aircrafts over the High Seas) and, secondly, making appropriate adaptations to reflect the differences between the maritime law and the space law, in particular, the differences between the flag of a vessel and the registration of a space object.

As the private disputes that can arise in the era of long term human presence in the space are diverse, this paper cannot but focus on a few of such issues, which are affected most significantly by the uniqueness of the space law. Thus, the tort liability arising from the collision of space debris into another space object (II), the property rights in a space object, in particular the security interests in a space object (III), and the contracts for manned transport to the space (IV) are analysed below.

Needless to say, it is national courts that determine the law applicable to each dispute before them through their own conflict of law rules, and these rules are usually embodied in each national legal system. Therefore, strictly speaking, the conflict of law problem cannot be analysed without looking at the rules of each state. It is also true, however, that private international law has developed through comparative analysis of different legal systems, and some of the broad principles seem to be shared by many countries: "lex loci delicti" for torts, "lex rei sitae" for property and party autonomy for contracts. This paper examines how and to what extent these principles can be applied to the legal disputes arising from space activities. Modern conflict of law rules know the techniques to alleviate the rigidity and inflexibility of the lex loci delicti rule and the lex rei sitae rule, and have developed methods to protect the interests of a contracting party in a weaker position. These modern developments are also taken into account in the discussions below. It may be added that the disputes arising from space activities are more

frequently referred to the arbitration than brought before a court of law. In

arbitration, the prevailing approach is to allow party autonomy with regard to the governing law to a larger extent than in litigation. ⁴ Therefore, the discussions below will not necessarily apply to dispute resolution by arbitration.

II. Tort Liability from Collision of Space Debris

1. The Problem

The threat of space debris to human activities in the space has recently become well recognised. Assuming the long term human presence in the space, the collision could cause personal damages to the people staying in the collided space object.

Hypothetical 1: A person of State X stays in a space hotel registered in State X. The space hotel is operated by a commercial operator whose principal place of business is based in State X. One day, an uncontrolled space debris, which used to be the upper stage of a launcher launched by the commercial launch service provider in State Y, collides into the space hotel and lowered its cabin pressure. Although the life of the person has been saved by the emergency measures taken by the operator, the exposure to the paucity of oxygen for a certain period of time has left serious aftereffects on her. At the time of the launch of the launcher causing the debris, it was recommended by the international guidelines on mitigation of space debris to prevent any upper stages from remaining in the orbit, and the guidelines were adopted by major spacefaring nations, including State X. However, State Y had not yet incorporated them in its domestic space law and the launch service provider had not paid attention to this recommendation.

If the person suffering from the aftereffects chooses not to pursue the state liability of the launching state Y but to accuse the launch service provider generating the debris, a conflict of law issue arises: which of the laws, law of State X or of State Y, applies to determine the liability of the launch service provider?

2. Collision

Collision is a typical case of a tort. For the conflict of law rules of tort, the most widely accepted rule is that the law of the place where the tort is committed (*lex loci delicti commissi*) should apply. For the cases where the component factors of a tort spread over different states, some recent legislation, such as "Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to noncontractual obligations (Rome II)", elaborates on this rule and provides that in general the law of the place where the direct damage from the tort occurs (*lex loci damni*) shall apply⁵. The *lex loci damni* rule will not cause difficulty as far as the damage due to the relevant space accident is realized on the

⁴ For example, UNCITRAL Model Law on International Commercial Arbitration, with amendments adopted in 2006, Article 28.

⁵ Rome II, Article 4, para.1.

surface. Even if the collision itself takes place in the space, as long as the damage is incurred on the ground, such as in the case where a part of the collided space object falls on the earth, the law of the place where such damage on the earth was incurred will govern the tort liability. However, in the hypothetical 1 above, the damage to the collided space object itself, or to the person on the collided space object, occurs in the outer space. Because the outer space has no local law, the *lex loci damini* rule cannot properly solve the problem under the hypothetical 1 above⁷.

3. Collision on the High Seas

Similar problem arises when two vessels collide on the High Seas. Nowadays many commentators will agree that in a case where two vessels fly the flag of the same state, the law of that flag state shall apply. If the flags of the two vessels differ, there are various possibilities. Some courts have applied the law of the flag state of either of the vessels involved. Courts in those countries adopting *lex loci damni* rule will apply the law of the flag of the collided vessel, while courts in others might apply the law of the flag of the colliding vessel. As this approach will sometimes lead to the application of two different laws to a collision case, and does not appear adequate to solve various legal problems arising from the collision in a consistent manner, some commentators resort to the law of the forum (*lex fori*). In

4. Collision in the Space

Because the damage from the collisions in the outer space occurs in the place with no local law, the basic rule of *lex loci damni* cannot be applied. Instead, the law that has the closest connection with the incident needs to be sought for. The situation might seem similar to the case of collision on the High Seas, mentioned in I.3. above. However, the approach there is, in fact, not as useful as it appears at first sight.

First, as mentioned in I.2. above, the registration of the space object differs from the flag of the vessel in nature. The registration under the space law treaties does not give nationality to the space object, which makes it even

⁶ This does not exclude, of course, the international liability of the launching state of the colliding space object, as opposed to the civil liability s.

⁷ Haanappel, supra note 1, p.99.

Bach in: Peter Huber (ed.), Rome II Regulation: Pocket Commentary, p.106 (Art.4 Rome II, para.97) (2011, sellier).

Regarding various positions taken by national courts, see, for example, Jürgen Basedow, Rome II at Sea – General Aspects of Maritime Torts -, RabelsZ Vol.74, p.118, at p.135 (2010).

Andrew Dickinson, The Rome II Regulation: The Law Applicable to Non-contractual Obligations, p.324 (paras. 4.56 – 4.57) (2008, Oxford University Press)

See Basedow, supra note 9, pp.135-137; criticized by Andrew Dickinson, The Rome II Regulation: The Law Applicable to Non-contractual Obligation: Updating Supplement (2010, Oxford University Press), pp.40-41 (para.4.56A).

more difficult to deem the space object as part of the territory of the state of registry. Moreover, the colliding debris may not have been registered as such. If the debris used to be part of a registered space object, it may be argued that the registration of the original space object will remain¹². However, it is the upper stage of a launcher that creates a larger risk in the Low Earth Orbit (LEO), where human beings will more likely be present. As mentioned above, the upper stages are often not registered, in particular if they originate from the launch of many years ago.

Secondly, the law of the state of registry of a space object is not necessarily the law that has the closest connection with the collision of space objects in the outer space. While the rationale for applying the law of the flag in the cases of collision of the vessels on the High Seas mainly lies in the fact that each flag state has, and in fact exercises, jurisdiction over the vessels carrying its flag, the state of registry of the colliding debris is not necessarily the state that exercises effective control over the debris. Under the OST, the activities of private (nongovernmental) party in outer space shall require the authorisation and continued supervision of an appropriate State Party (OST, Art.VI). When the current operator of a space object is located in a state different from the state from which the space object was launched, the "appropriate state" to authorise and exercise continued supervision will be the state where the current operator is located. Suppose, making a slight modification to hypothetical1, that the collided space object under the hypothetical 1 was owned by a company of State Z when launched, and registered by State Z, not by State X. Suppose further that the object was thereafter transferred to the company in State X, which operates the object under the license of State X now. When a space debris, registered by State Y, collides into such a space object and causes damages to the person staying in the latter, applying the law of State Z to determine the liability for damage sounds strange.

In these cases, it can be argued that the law of the country where the current operator of the space object is located, namely State X, has closer contact with the incident than the law of the state of registry of the space object, State Z. This solution seems like a divergence from the general "lex loci delicti" rule, but would be justified under modern national conflict of law rules by "escape clause" which enables courts to apply the law of the country with a "manifestly closer connection" to the situation in an exceptional case. This escape rule is adopted in Europe¹³ and Japan, ¹⁴ where traditionally more rigid approach to determine the applicable law used to be preferred. In the United States, the Restatement (Second) of Conflict of Laws generally provides that the law of a state having "the most significant relationship" to

Manfred Lachs, The Law of Outer Space: An Experience in Law-Making, p.67 (reprint, Martinus Nijhoff, 2010)

Rome II, Article 4, para.3.

¹⁴ The Act on General Rules for Application of Laws (Law no.78 of 2006), article 20.

the occurrence and parties of the tort shall apply. Therefore, applying the law of the operator's country may be well founded under the current conflict of law rules in major jurisdictions. On this analysis, the international guidelines on mitigation of space debris might be considered in determining the liability of the relevant operators under the governing law thus determined.

III. Security Interests in a Space Object

1. The Problem

When human beings are present in the space for a long term, many space objects will be constructed. It means that financing of construction becomes important. The financier may wish to make sure that its credit is properly secured, most typically by creating a security interest (such as mortgage, pledge, hypothèque) in the financed object, which has the value as an asset. When the owner of the financed asset, financier, and the possible third party with a stake in the asset are from different jurisdictions, the conflict of law becomes the issue. Hypothetical 2: A communication satellite on the geostationary orbit is owned by a private satellite operator (debtor) in State D. Prior to launch, a secured finance was extended by a financier (bank) in State F, which filed its security interest in the satellite in the State F's registry of personal property security interests. State D has no such registry, because that State does not allow creation of non-possessory security interests in personal property.

Soon after the operation of the satellite commenced, the operator encountered financial difficulty and approached another financier in its home country, State D. The latter financier requested as a condition for extending finance that the title to the satellite be transferred to it by way of security. The operator agreed, and transferred the satellite, by the declaration that the operator, from the time of the second finance, will possess (control) the satellite on behalf of the second financier. Such transfer of possession by declaration is valid under the law of State D, but may not be opposable against the holder of a filed security interest under the law of State F.

Security interest is considered in most jurisdictions as a kind of property right. The basic rule for conflict of laws is that the law of the place where the encumbered asset is located (*lex rei sitae*) applies with respect to the validity and priority of the security interest. Such a rule is less appropriate when the encumbered asset moves across the borders. In the case of space assets, they move not across the borders, but in the outer space where no national law exists. The application of *lex rei siate* does not seem to be workable.

2. Mortgage in the Vessel

In the case of mortgage over a vessel, many countries adopt the rule that the law of the state of flag, or, more precisely the state of registry of ownership and mortgages, applies with respect to the validity. With regard to the issue of priority among the mortgages and liens, some courts characterize it as procedural and apply *lex fori*, while others regard this issue as substantial

and apply the law of the state of registry or the law of the country where the vessel exists at any given time. Applying the law of the flag state in these circumstances can be justified in some ways.

Firstly, ships are deemed as conferred the nationality of their flag states, and most, if not all, of the countries have a register of vessels flying its flag. The register records the ownership and mortgages created over the vessels and these records are decisive in determining the validity and priority of such property rights under the national law. Therefore, there is a good reason for referring to the law of the mortgage registry, which coincides with the law of the flag state in many cases, when determining the validity of mortgages over the vessel also in the context of conflict of laws.

Secondly, the state of registry can be regarded as a significant connecting factor for ships because ships move across the borders, and the law of the state of registry can provide certainty and predictability for the parties having interests in the registered ship. This is why the state of registry, at least when the law of the actual place of the ship is manifestly inappropriate to be applied to the case, can be assimilated to the law where the object exists (*lex rei sitae*).¹⁵

These arguments over vessel mortgages are applied to mortgages to aircrafts as well. The state that registers the aircraft exercises jurisdiction over the aircraft and keeps records of ownership in and mortgages over the aircraft in the registry. Therefore, it is the law of the state of registry (*lex registrii*) that governs the validity and priority of mortgages in aircraft. Based on this understanding, the Geneva Convention on the International Recognition of Rights in Aircraft of 1948 ensures the mutual recognition and enforcement of mortgages in aircraft among the States Parties.

3. Security Interest in Space Assets

In the case of space objects, because they are, once launched, located in the outer space where no national law exists, similar considerations as in the case of security interests over the vessels or aircrafts may be relevant. OST provides that the state of registry of a space object exercises jurisdiction and control over the object. As the "jurisdiction" in this provision is understood to include the power of legislation, it might seem reasonable to assume that both the validity and priority of the security interests in a space object should be governed by the law of the state of registry. ¹⁶ It must be pointed out, however, that OST grants no nationality to space objects, and the registration does not affect this aspect. From this point of view, the link between the nationality and the registration is much weaker in the case of space objects, as compared to ships or aircrafts.

See for example Dicey, Morris & Collins on the Conflict of Laws, fifteenth edition, volume 2, p.1300 (para.22-058) (2012, Sweet & Maxwell).

Münchener Kommentar zum Bürgerlichen Gesetzbuch: Bd.11, 5. Aufl. Art.45, Rdn.18 [Wendehorst] (Beck, 2010).

Moreover, many jurisdictions do not have a registry equivalent to that for vessels or aircrafts. The ordinary domestic registry, established to satisfy the legal obligation under RC, are aimed at publicising the fact of launching the space object to identify the launching state liable for damages caused by the space object. They are not for the purpose of disclosing the private rights or interests in the space object, still less of determining their validity.

Many countries do not have any registry systems other than those described above for space assets. Under the traditional system of the Civil Law, registrable security interests cannot be created in movables, other than the specific types of asset that is treated in the same way as real property. Usually vessels, automobiles and aircrafts belong to such types of asset, but not space assets. In those states, space assets cannot be mortgaged. They might be pledged through the acquisition of possession by the creditor (pledgee), though the meaning of possession of space assets has not been much discussed yet. In these jurisdictions, there exists no registry for ownership or mortgages in space assets.

In common law countries, personal property may be mortgaged, and the recent legislation in several jurisdictions introduce a unified filing system for security interests in personal properties. In these jurisdictions, security interests in space assets may be filed in such files for personal property. In practice, the first security interest in the satellite is usually created when the finance is extended for construction, namely before launch. It is a common practice in the United States to file the security interest in the file under Article 9 of the Uniform Commercial Code (UCC). Less frequently in practice, a security interest might be created in the satellite and filed in the same UCC file after the satellite is launched into the orbit.

Thus, contrary to the cases of vessels and aircrafts, there is no common understanding that the state of registry keeps records of security interests in space assets. In some jurisdictions, the filing system exists but it is not a comprehensive registry system designed for space assets, while in others, nothing at all exists for recording private interests in space assets. This means that the law of the state of registry of space asset (*lex registrii*) has much less significant connection with a case concerning the validity and priority of security interests in the space asset than the law of the state of registry of vessels or aircrafts will usually have.

Turning again to the international regime, Article VIII of the OST provides that the ownership of a space object or its component is not affected by the launch into the outer space. It might be argued that this provision implies that the security interests in a space asset filed before the launch under a certain registry system, such as filing under UCC Art.9, shall remain unaffected even after the space asset is launched into the space. However, even so, this will not solve all the issues regarding proprietary interests. Can a new financer register a creation of interests in the space asset already in the outer space in the same filing system? What if such a filing system is unavailable for the debtor-owner of a space asset? Will a state having no equivalent filing system, such as State D, recognise and

enforce these filed rights or interests? Can the ownership and interests in the space assets filed under the system be transferred in accordance with the law of the filing system?

If the conflict of law rules choosing the law of the filing system has many problems to be widely accepted, one possibility will be to apply the law of launching state, which is relatively certain because it does not change after the launch. This solution, however, may not be convincing, considering the limited relevance of the launching state (which is the state of registry for the purposes of outer space treaties) to the security interests discussed above. Another possibility might be to resort to the law that has the closest connection with the secured transaction. But, what is the law that has the closest connection? UCC Article 9 seems to take the position of applying the law of the state where the debtor is located as the law which has the most significant connection with secured transactions. The basic rule for the conflict of laws under the UCC Article 9 is that the law of the state where the debtor is located governs the perfection and priority issues (see UCC §9-301(1)).¹⁷ The choice of law rules in the Article, however, does not determine the priority of security interests if the encumbered asset is located in a foreign jurisdiction, in which case the law of that foreign state will apply. Further, it is not explicitly provided in the UCC which law will apply when the encumbered asset is located in a place with no national law. One commentator argues that the parties will be allowed to make a choice among the laws of the state bearing "a reasonable relation" to the transaction. 18 Inspired from the basic rules under the UCC Art.9, the law of the state where the owner of the space asset (debtor) is located may be appropriate for governing the validity and priority of security interests in space assets. It will avoid the uncertainty of determining "the close connection with the transactions" on a case by case basis. Further, it enables the creditor to exercise the security interest in case of the debtor's default without complicated legal issues. In addition, considering the fact that filing under the UCC is already the current practice of space financing, this approach has an advantage of not changing the practice.

4. Solution by Uniform Law Treaty: The Cape Town Convention

An alternative solution is to exclude the conflict of law rules and apply the uniform law rules directly. For the secured transactions, such a solution is now possible, as a result of the adoption of the Space Assets Protocol to the Cape Town Convention. The Cape Town Convention is directly applicable when the debtor is located in one of the Contracting State. Parties are free to choose the governing law, but the validity and priority are determined according to the registration with the International Registry, and not by the

¹⁷ Uniform Commercial Code §9-301.

¹⁸ Mark Sundahl, The Cape Town Convention, p.18 (Brill, 2013).

chosen law. With the huge uncertainty and lack of clarity with respect to the conflict of law rules, the Cape Town Convention, once entering into force, will bring about significant benefits to the secured transactions in space assets.

IV. Contract for Human Space Flight

1. The Problem

In order for human beings to be present in the outer space, the transport of them from the Earth into the outer space is indispensable. If the operator of a space vehicle fails to operate safely and causes damages to the person on board, the governing law to determine the liability of the operator will come into question.¹⁹

The problem might appear to be easier as compared with the previous two problems, because the absence of any national law in the space usually does not matter. The agreement for space transport will probably contain a clause on the governing law of the contract, and maybe a clause on the choice of forum as well. In such a case, the question appears to be limited to whether the court of the chosen forum gives full effect to the choice of law and forum clause.

However, it should be noted that the party autonomy is not without limit. It is not the space law treaties but national law that is relevant here, as the OST and the Liability Convention (LC) only deal with the state liability (of the launching state). To be more precise, some jurisdictions might have a law on the liability of space vehicle operator with strong policy implications. Such statutes do exist in some states within the US: the so-called informed consent laws of those states provide that the operator and other related parties (such as suppliers or manufacturers) are exempted from liability for damages on condition that the operator fully informs the flight participant (passenger) about the risk of space flight and confirms the consent of the flight participant in writing.²⁰ How to deal with such laws with policy implications needs to be considered here.²¹

Hypothetical 3: A person whose habitual residence is in State P plans to travel to a space station by a space vehicle operated by a vehicle operator in State Q. The conditions of carriage prepared by the operator contain a provision on the governing law, which provides that the contract is governed by the law of State R. Under the law of State R, a contractual clause limiting the liability of the transport service provider (of any kind) is valid unless the damage results from an intentional act or gross negligence of the service provider. State P, however, has a consumer protection law, which prohibits

¹⁹ For general analysis covering the US, European and Russian law, see Michael Chatzipanagiotis, The legal status of space tourists in the framework of commercial suborbital flights, pp.72-83 (Carl Heymanns, 2011).

²⁰ California Civil Code, \$\$2210 –2212; Colorado Revised Statutes, \$41-6-101; Florida Statutes, \$331.501; New Mexico Statutes, 41-14-1 – 41-14-4; Texas Civil Practice and Remedies Code, \$\$100A.001 – 100A.004; Virginia Code 8.01-227.8 – 8.01-227.10.

²¹ Cf. Chatzipanagiotis, supra note 19, p.74.

such limitation of liability in a contract between a consumer and a business entity with regard to loss of life or bodily injury of a consumer. Further, the space vehicle is to depart from a space port in State Q, where space vehicle operators, manufacturers and suppliers to a space vehicle are exempted from such liability by a statute of State Q.

2. Passenger Transport Contracts for Maritime or Air Law

In the case of maritime transport, the general rule in most jurisdictions is to enforce the choice of law by the contracting parties. Sometimes the law that can be chosen is limited, as in the case of "Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I)", which requires that the law applicable to the contract of carriage of passengers must be chosen from among the laws of the country where the passenger has his habitual residence, the carrier has his habitual residence, the carrier has his place of central administration, the place of departure is situated or the place of destination is situated.²² Further, because the passenger is often a consumer, the contract is governed, in principle, by the law of the country where the consumer (passenger) has his habitual residence.²³ In the case where a professional (carrier) chooses other laws as the governing law, the consumer is still entitled to the "protection afforded to him by provisions that cannot be derogated from by agreement by virtue of the law which, in the absence of the choice, would have been applicable (namely the law of the country where the consumer has his habitual residence)."²⁴ More or less the same outcome will be reached under the Japanese law, which entitles the consumer to request the application of the mandatory provisions of the law of the state where the consumer has his habitual residence.²⁵ Thus, consumers enjoy the benefits under the consumer protection laws of their own country.

Here again, an alternative solution could be provided by uniform law conventions which directly apply to transport within their scope of application. This is the case with the carriage of passengers by sea, where the Athens Convention is applied irrespective of the governing law among the State Parties. The more widely accepted instrument of the same nature is the Montreal Convention of 1999 on the international carriage by air, which succeeded the equally successful Warsaw Convention. It regulates the liability of the carrier directly and controls the validity of the contractual clauses exempting or limiting the carrier's liability.

²² Rome I, Article 5, para.2.

²³ Rome I, Article 6, para.1.

²⁴ Rome I, Article 6, para.2.

²⁵ The Act on General Rules for Application of Laws, article 11 (1).

3. Space Transport Contracts

In the case of space transport contract, whether or not a flight participant is a consumer can be a question. It is the question of interpretation, if the conflict of law rules of the forum gives special considerations to the consumer contracts. As the consumer is usually defined as "a natural person [concluding the contract] for a purpose which can be regarded as being outside of his trade or profession", ²⁶ it is likely that a space flight participant is regarded as "consumer passenger" and entitled to the protection under the relevant conflict of law rules.

Then, the applicability of the informed consent statutes will come into question. It is obvious that such a statute is a mandatory law. The approach in Civil Law jurisdictions is that if such informed consent statutes form part of the law of the forum, the question is whether the statute is regarded as "overriding mandatory provisions." 27 If the forum is in a different jurisdiction than the state having the informed consent statute, the question is more complicated. In Europe, Art 9 (3) of Rome I merely refers to the overriding mandatory provision of the country where the contractual obligation is performed, and to the extent that such overriding mandatory provisions render the performance of the contract unlawful. This rule would make it difficult for the carrier to enforce such informed consent statutes. First, when the human space flight departs from the state where the informed consent statute is enacted, and ends in the outer space, whether the departure state can be seen as the place of performance is debatable. Secondly, and more importantly, it is questionable that the statute to exonerate the liability of the transport operator qualifies as the provision to render the performance unlawful. The approach before the US courts would be to consider whether such informed consent statue amounts to public policy under the otherwise applicable law absent the parties' choice of the law of State R (see Restatement (Second) of Conflict of Laws §187). As US courts would prefer the law of the place of departure to that of the place of destination (see Restatement (Second) of Conflict of Laws §197), the otherwise applicable law is likely to be the law of State Q, and the informed consent statutes will probably be more easily enforced.

V. Conclusion

The long-term presence of human beings in space will bring about the disputes between private parties, which inevitably give rise to conflict of law issues. They appear to be similar to the conflict of law issues on or over the High Seas, as they concern the incidents occurring in the territory where no

²⁶ Rome I, Article 6, para. 1. Similarly in Japan, the Act on General Rules for Application of Laws, article 11 (1).

²⁷ Rome I, Article 9, paras. 1 & 2.

national law exists. The uniqueness of the space law is that the state on whose registry the registration of space object is carried exercises the jurisdiction and control of the space object. However, the close analysis of a few hypothetical cases reveals that the jurisdiction of the state of registry is not so decisive in determining the governing law as it appears at first. A more thorough analysis of the interests involved is necessary.

It cannot be denied that the analysis is complicated. Further, given that the space activities, even after the long-term presence of human beings in space comes true, will remain limited in terms of scale and number of people involved, the conflict of law rules will still be uncertain, due to the scarce number of cases. Therefore, the alternative approach of promulgating the conflict of law rules is worth considering.

One possible approach is to include the conflict of law rules in national space legislation.²⁸ However, if the conflict of law rules differ in major jurisdictions, the uncertainties will remain and, even worse, forum shopping can take place. Thus, one may turn to the proposal to work on the unified conflict of laws rules with regard to space activities, which was made as early as the end of 1970's.²⁹

At that time, it was argued that the unification of substantive law was too early when the space activities by human beings were not predictable yet, and that the unification of conflict of law rules was more preferable. Decades later, the commercial space activities seem to have become much more predictable. Indeed, with regard to the satellite operation and its financing, where the space business is most advanced and most established, the uniform substantive rules have been produced by the Space Assets Protocol to the Cape Town Convention. The Cape Town Convention and its Protocol, once entering into force, shall apply irrespective of the conflict of law rules and will simplify the transaction significantly. It may be worth considering forming a certain unified substantive rules in the form of a treaty in the sectors for which the commercial space activities are established to a certain degree and the interests involved has become predictable.

Lesley Jane Smith, Collisions in space: perspectives on the law applicable to damage arising from space objects, in: Proceedings of the International Institute of Space Law p. 230 (Eleven International Publishing, 2013).

²⁹ Hamilton DeSaussure & P.P.C. Haanappel, A Unified Multinational Approach to the Application of Tort and Contract Principles to Outer Space, Syracuse Journal of International Law, vol.6, p.1 (1978).

³⁰ Id., at p.11.