

EFFECTS OF SATELLITE OWNERSHIP TRANSFERS ON THE LIABILITY OF THE LAUNCHING STATES

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With the increasing commercialisation of space, there remains one crucial question that continues to be unanswered that relates to commercial satellites. The law appears to be quite clearly established, after decades of interpretations and analyses by learned scholars of international law, as to the liability of the "launching States" in relation to the launching of "space objects". What remains unclear, however, is what happens to this liability when the ownership of a commercial satellite is transferred?

To illustrate a complex legal problem, it is often best to utilise a practical example. In this hypothetical, a telecommunications satellite (S-1) transmitting in Ka bands in the geostationary orbit is owned and operated by an Australian company, Oldco. Oldco, in turn, is fifty-one per cent owned by an American company, Parentco, based in California. Oldco has contracted with an American satellite constructor to build its new geostationary satellite (S-2), which is to be launched from French Guiana in 2002. This satellite will transmit in the

same frequencies at 5° east of S-1. The question relates to the liabilities for these two satellites after their sale.

Existing Duties and Liabilities

It is important to begin with an analysis of the existing duties and liabilities in relation to S-1 and S-2 before considering what would happen upon sale or transfer of the ownership of the satellites or its holding Australian company.

There are four aspects of liability and responsibility in relation the S-1 and S-2 that currently exists. They are:

- liability for launch (S-2) and re-entry (both S-1 and S-2);
- liability for damage by collisions in space;
- liability for harmful interference of radio transmissions; and

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- the exercise of jurisdiction over the relevant satellites.

Liability for Launch and Re-entries

The Liability Convention imposes a liability for damage incurred by another State in the form of "loss of life, personal injury or other impairments of health, or loss or damage to property of States or of persons, natural or juridical, or property of international governmental organisations".¹ This liability is imposed on a "launching State" which is defined as "a State which launches or procures the launch of a space object or a State from whose territory or facility a space object is launched," regardless of whether the launch was in fact successful or otherwise.²

In the case of launch, the damage would be caused on the surface of the Earth or to an aircraft in flight. In such a case, the liability to compensation shall be absolute.³ If the damage suffered were within the territory of a launching State, then the liability would be a domestic one and would be pursued in the courts and determined using the relevant tort principles.

Some countries have legislated domestically to pass on the liability to the launch operators. After all, the "appropriate States" are required undertake authorisation and continuing supervision of commercial space activities under the Outer Space Treaty.⁴ In the case of Australia, for example, there are provisions under the *Space Activities Act 1998* (Cth) for compulsory insurance up to the "maximum

probable loss", above which the government would pay the excess claim.

In our factual scenario, the launching States would be France and Australia. Since the majority ownership of Oldco is vested in a U.S. company, it may be arguable that the United States has "procured" the launch as well, making it a launching State. In any case, it is clear that both the *Commercial Space Launch Act 1984* (US) and the *Space Activities Act 1998* (Cth) would apply to the launch of the S-2. This means that the licensing and compulsory insurance provisions of both countries would have to be complied with before launch. The fact that the *Commercial Space Launch Act* applies to U.S. majority-owned foreign company may be a positive affirmation on the part of the United States that it is liable if a satellite owned by that subsidiary causes any loss or damage to third parties.

How the mechanisms for settling such international claims would work under the Convention has been heatedly debated among academic circles but has never really been put to the test in practice.⁵ The only notable international compensation claim for damage to date, the case of *Cosmos-954* where the Soviet satellite unexpectedly returned and landed in Canada, was resolved without explicit reference to any particular provision of the Liability Convention. If it did, the process is likely to have been drawn out for many years, thus placing a heavy financial burden on any commercial undertaking outside the government sector.⁶

¹ Liability Convention, Article I.

² *Ibid.*, Article II.

³ *Ibid.*, Article II.

⁴ Outer Space Treaty, Article VI.

⁵ See Böckstiegel, "Beilegung von weltraumrechtlichen Streitigkeiten", in *Handbuch des Weltraumrechts* (1991), pp 806-808

⁶ See Dunk, "Commercial Space Activities: An Inventory of Liability — An Inventory of Problems" [1994] I.I.S.L. 161 at 165.

Liability for Collisions in Space

However, if the damage caused by a space object were incurred by collision in space, then the "launching State" would be liable only if it could be established that the damage caused due to fault on the part of the "launching State" or its nationals responsible.⁷ This appears to provide a convenient escape-route for the "launching States" if it has disposed of the satellites, since they are very much unlikely to be at fault for damage caused by a satellite that is already functioning in orbit.

In the complicated event of where the space object of one launching State causes damage to a space object of another launching State that was not on the surface of the Earth and subsequently causes damage to a third State, then the launching States of the two space objects shall be jointly and severally liable to the third State.⁸ Similarly, when two or more States jointly launch a space object, the launching States would also be jointly and severally liable for any damage caused.⁹

In cases of two or more launching States with joint and several liability, as is the case with the launch of both S-1 and S-2, the burden of compensation would be apportioned between them in accordance with the extent of fault¹⁰ or otherwise it would be apportioned equally between them unless there is an agreement purporting to the contrary.¹¹ Consequently, France, Australia and possibly the United States would be liable to the extent that the damage caused can be attributed to the fault of their nationals.

⁷ *Ibid.*, Article III.

⁸ *Ibid.*, Article IV.

⁹ *Ibid.*, Article V.

¹⁰ *Ibid.*, Article IV.

¹¹ *Ibid.*, Article V.

Liability for Harmful Interference

The Constitution of the International Telecommunications Union provides that "All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other members".¹² The term "harmful interference" has been defined as "interference which endangers the functioning of a radionavigation services ... or seriously degrades, obstructs or repeatedly interrupts a radiocommunications service".¹³ Under the Radio Regulations, the liability for harmful interference is placed squarely on the States rather than the satellite operators themselves.

In this case, as S-1 is a satellite owned and operated by an Australian company, the liability for harmful interference would be imposed on Australia. It should be of no surprise that Australia, in turn, requires any radiocommunications by Australian satellites to be licensed with the Australian Communications Authority (ACA) and refrain from such interference.

Jurisdiction over the Satellites

Under the Outer Space Treaty, Australia would retain jurisdiction and control over a satellite provided that it is on the Australian registry.¹⁴ Curiously, the Registration Convention only allows for one state to be the state of registry. In essence, this means

¹² Constitution of the International Telecommunications Union, Article 45.

¹³ *Ibid.*, Optional Protocol on the Compulsory Settlement of Disputes Relating to the ITU Constitution, the ITU Convention and Administrative Regulations (1994), Definition of Certain Terms.

¹⁴ Article VIII.

that only one state can exercise jurisdiction over the satellites.

In our situation, Australia would have registered the satellite with the United Nations Register of Space Objects and she would, therefore, be able to exercise jurisdiction over the satellites.

Selling the Business

Now assume that Parentco wishes to leave the satellite telecommunications business and has found a prospective buyer in Newco. There are obviously two ways of going about it for Parentco — either sell Oldco as a going concern to Newco or to sell the assets and assign all existing contracts to Newco and then wind up Oldco.

The first option appears to be far less complex than the second option. If Newco is another U.S.-based company, then the liability of Australia and the United States would remain unchanged after the sale. However, if Newco is a German company, or any country other than the United States, then a different scenario emerges.

The liability provisions contained in the Outer Space Treaty and the Liability Convention only refers to the “launching States”. Clearly, in the case where the ownership has transferred to another entity, it would be unjust to continue holding the original states responsible. Certainly, as a matter of commercial sense and practice, some form of indemnity in this case would be demanded from Newco to the launching States for any liability resulting from S-1.

If there is no such indemnity and a collision occurs in space or if S-1 caused damage in an unexpected re-entry, the liability question is somewhat difficult. The easiest solution would be to argue that as Oldco is an Australian entity and that, for all intents

and purposes, it has control of the satellite and therefore Australia should be liable for it. This would be consistent with the requirement under the Liability Convention for fault to be demonstrated. In this case, only Oldco can be confidently demonstrated to be at fault.

The justification for the position in the treaties is that since it was the launching States that placed the satellite in space, it should be the launching state that remains responsible for it should it cause damage to innocent third parties. The justification for fault-based liability is an obvious one: a “launching State” should not be held responsible for damage caused in space when it may well have nothing to do with the intentional, reckless or negligent act or omission that caused the damage.

On the other hand, it may well be suggested that since the satellites have been sold, the United States should be allowed to wash its hands completely of any responsibility that does not directly relate to the launch. As a result, the liability for any damage resulting from the continuing operation of the satellite should be borne by Germany, jointly and severally with the Australian subsidiary.

The general international law principle of state responsibility provides that a state is responsible if it breached any obligation under international law.¹⁵ The principles for this can be found in the *Corfu Channel Case (Merits)* between Albania and the United Kingdom. In this case, the International Court of Justice held that if the state has knowledge of an act that is contrary to international law had been

¹⁵ See, for example, Articles 1 and 2 of the International Law Commission Draft Articles on State Responsibility (1996) G.A.O.R., 51st Sess., Supp. 10, p. 125.

conducted within its jurisdiction, then the state will be held responsible if damage has been incurred by another state.

In our scenario, if Germany is to be imputed with the acts of its subsidiary since Germany is required under the Outer Space Treaty to authorise and continually supervise the activities of its nationals in space activities. As a result, Germany cannot argue that any act of Newco, which resulted in liability arising, cannot be imputed to the state itself.

This does not alter the fact that, under the Liability Convention, the "launching States" would remain liable and a victim state is not going to do any more than lodge a claim under the Convention against the "launching States", and let the states involved to sort it out between themselves.

Consequently, a victim state would probably lodge a claim against Australia, which may then seek contribution from Germany and the "launching States", depending on the cause of the incident. As France, Germany and the United States and Germany would have strong cases in showing that they were not at fault in anyway, the likely outcome is that Australia would end up with the burden of paying the damages under the Convention.

In terms of the radiocommunications and jurisdiction issues, since Oldco remains an Australian going concern, the Radio Regulations and the Registration Convention would continue to apply, requiring Australia to exercise jurisdiction over the satellites and to regulate its use of radio frequencies.

Selling the Satellites

Selling the satellites, on the other hand, is a far more complex scenario. There may be many reasons why Newco and Parentco

may choose to transfer the satellites rather than sell Oldco as a going concern. Oldco may have substantial liabilities that Newco does not wish to take over. Newco may also wish to reduce its tax liabilities in Australia or in Germany. As a result, Newco may simply consider purchasing S-1 and the contracts relating to S-2 rather than Oldco itself.

With S-2, the issues are quite simple, provided that there are no restrictions on the assignability of the contracts. Newco would simply take over the construction and launch contracts for the new satellite, and the "launching States" for it would be Germany, for procuring the launch, and France, from whose territory the satellite was launched. As a result of this, neither the American nor the Australian domestic statute would apply to the launch of S-2 after the transfer.

With S-1 the answers are not as simple. The "launching States", as determined earlier, are Australia and France, possibly the United States as well. With the acquisition by Newco, Australia and the other launching States will continue to be liable even if the incidents involving damage were caused wholly by the fault of the German operator.

Since the "launching States" are unlikely to be at fault, this in effect means that the Liability Convention can no longer be relied on in the case of a satellite having been acquired by another state or its nationals. Once again, the principles of state responsibility would have to be relied upon for Germany to be found liability in any contribution proceedings between the "launching States" and Germany.

The Registration Convention, as mentioned previously, does not allow for the registration of multiple states as states of registry. It also does not provide for the

transfer of registration, which means that Australia would continue to exercise jurisdiction over S-2. Of course, there does not appear to be any provision that restricts the ability of Australia to deregister its satellite and then for Germany to register it.

Conclusions and Solutions

As illustrated above, the issues of liability in the case of a transfer of ownership of satellites remain unresolved. The states on which liability is to be imposed appear to depend on a myriad of factors, including the element of control of the parent company over the Australian subsidiary, the apportionment of fault between the launch and the operation of the satellite, and on the means by which the ownership in the satellites are transferred.

In my opinion, this is clearly not conducive to a truly global and commercial space industry. The space and telecommunications industries no longer reside in a world dominated by the demarcation of nation-states. In the 21st Century, the world must move to adopt a régime that is more reflective of the needs of the commercial space industry.

The liability for damage caused by satellites should no longer be dependent on the “launching States”. Instead, there should either be a truly fault-based system where the life of a satellite would be divided into liability phases: launch, functional operation and retirement.

During launch, it is the “launching States”, defined as the nationality of the launch territory and the launch operator, which should be liable. During the functional operation phase, it should be the state that has the operation and control of the satellite that should be liable for any damage incurred in space or on its unexpected re-entry. On retirement, the

liability should fall squarely on the entity (or country) that had the ability to return the satellite to Earth (so that it would be destroyed in the atmosphere during re-entry) and failed to do so. Liability in this phase should not be based on fault, as that would merely encourage the proliferation of space debris, especially along the geostationary orbit.

In such a manner, the liability of states would be clearly defined and the development of a truly global and commercial space industry can indeed become a reality, without the constant need to refer to principles of customary international law that may well be clear in theory but murky in its application.