

THE 2009 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION

CASE CONCERNING THE DEPLOYMENT AND USE OF FORCE IN LOW EARTH ORBIT

FORNJOT V TELESTO

PART A: INTRODUCTION

The 18th Manfred Lachs Space Law Moot Court Competition took place during the IISL Colloquium held in Daejeon, Republic of Korea in October, 2009. This year, the name of the problem was *Case Concerning the Deployment and Use of Force in Low Earth Orbit* (Fornjot v Telesto), which was written by Mr. Ricky Lee.

As in past years, three regional preliminaries were held to select a team of Asia-Pacific, Europe and North America Regions.

For the Finals, the Institute was honoured to have Judges Koroma, Tomka and Skotnikov, of the International Court of Justice, to judge the finals, which were held at the Solomon Law Park in Daejeon, Republic of Korea.

The final was organized by representatives of the Local Organizing Committee, along with IISL members: Prof. Kim, Prof. Rhee, and Prof. Hong.

The following organizations supported the events:

- Local arrangements and IISL Annual Dinner: IAC Local Organising Committee and Kyeryong Construction Co.
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- Book awards: Martinus Nijhoff Publishers.

The IISL is most grateful to all these generous sponsors and individuals.

Results of the world finals:

Winner: National Law School of India University, Bangalore, India (Ms. Raesa Vakil, Mr. Abhimanyu George Jain and Mr. Shwetank Ginodia; Coach: Dr. Sairam Bhat).

Runner-up: Georgetown University, USA (Ms. Christina Calce and Ms. Lorinda Laryea; Coach: Prof. Paul Larsen).

2nd runner-up: University of Stathclyde, Scotland, UK), (Ms. Emma Boffey, Ms. Laura Mackenzie and Mr. Stephen Donnelly; Coach: Ms. Aimée Asante).

Eilene M. Galloway Award for Best Written Brief: Georgetown University, Washington DC (USA)

Sterns and Tennen Award for Best Oralist: Ms. Raesa Vakil, National Law School of India University, Bangalore (India).

Lee Love Award for members of the Wining team: National Law School of India University, Bangalore (India).

Participants in the regional rounds

In the Asia Pacific:

1. Amity Law School, New Delhi (India).
2. Army Institute of Law, Mohali (India).
3. Beijing Institute of Technology, Beijing (China).
4. China University of Political Science and Law, Beijing (China).
5. Dr. Ram Manohar Lohiya National Law University, Lucknow (India).
6. Government Law College, Mumbai (India).
7. Government Law College, Ernakulam (India).
8. Gujarat National Law University, Gandhinagar (India).
9. Indian Law Society Law College, Pune

- (India).
10. Murdoch University Perth (Australia).
 11. National Law School of India University, Bangalore (India).
 12. National Academy of Legal Studies and Research, Hyderabad (India).
 13. National Law Institute University, Bophal (India).
 14. National Law University, Jodhpur (India).
 15. National University of Juridical Sciences, Kolkata (India).
 16. National University of Singapore (Singapore).
 17. Padjadjaran University, Bandung (Indonesia).
 18. Parahyangan Catholic University, Bandung (Indonesia).
 19. Tamil Nadu Dr. Ambedkar Law University, Chennai (India).
 20. Trisakti University, Jakarta (Indonesia).
 21. Pelita Harapan University, Banten (Indonesia).
 22. University College of Law, Dharwad (India).
 23. University of Kyoto, Kyoto (Japan).
 24. University of New South Wales, Sydney (Australia).
 25. University of Sydney, Sydney (Australia).
 26. University of Tokyo, Tokyo (Japan).

In Europe:

1. Catholic University of Leuven, Belgium.
2. John Paul II Catholic University of Lublin, Poland.
3. Riga Graduate School of Law, Latvia.
4. University of Augsburg, Germany.
5. University of Bournemouth (UK).
6. University of Inner Temple, London (UK).
7. University of Leiden, The Netherlands.
8. University of Paris XI, Sceaux, France.
9. University of Strathclyde, Glasgow, Scotland (UK).

In North America:

1. Georgetown University-Law Center, Washington DC (USA).
2. George Washington University, Washington DC (USA).
3. Howard University School of Law, Washington DC (USA).

4. McGill University-Institute of Air and Space Law, Montreal (Canada).
5. University of Mississippi School of Law (USA).
6. University of North Carolina School of Law, Chapel Hill, NC (USA).
7. University of Pittsburg, Pittsburg, PA (USA).
8. Yale Law School, New Haven, CT (USA).

Judges for written briefs:

- Dr. Peter van Fenema, The Netherlands.
- Mr. Steven Freeland, Australia.
- Dr. Martha Mejia-Kaiser, Mexico/Germany.
- Ms. Silvia Ospina, USA.
- Ms. Marcia Smith, USA.
- Prof. Haifeng Zhao, China.

Judges for semi finals:

- Prof. Dr. Stephan Hobe, Germany.
- Prof. Dr. Ram Jakhu, Canada.
- Prof. Sang-Myon Rhee, Republic of Korea.

Judges for finals:

- H.E. Judge Abdul Koroma, ICJ.
- H.E. Judge Peter Tomka, ICJ.
- H.E. Judge Leonid Skotnikov, ICJ.

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PART B: THE PROBLEM

STATEMENT OF FACTS

1. The Republic of Telesto is a rich and powerful continental State. It has one of the world's highest gross domestic product, both on an aggregate and per capita basis, and has one of the world's top ten territorial areas and population. It is also one of the world's most powerful and advanced military powers.

2. The Principality of Fornjot is an archipelagic State and is the largest economy in the world, with its principal economic activities being banking and finance, transport and shipping as well as the manufacturing of advanced technological products. Its location allows it to be shipping and aviation transport hub and a thriving centre of international commerce. In recent years, Fornjot has significantly increased its military expenditure, but its military power nevertheless lags far behind that of Telesto.

3. The Commonwealth of Daphnis is a former province of Fornjot that broke away in 2009 after a plebiscite supervised by the United Nations voted overwhelmingly in favour of independence from Fornjot. Relations between Fornjot and Daphnis remained tense, with Fornjot refusing to recognize the independence of Daphnis, despite its recognition by almost all Member States of the United Nations and its admission as a member of that organisation on 10 September 2010. In particular, the unsettled boundary between the two States has even led to skirmishes between the naval and air forces of the two States throughout the 2010s.

4. Relations between Telesto and Fornjot have traditionally been friendly. However, in recent times tensions have increased between the two States as they compete fiercely for world markets in raw materials and manufactured goods. This was particularly so with the continuing military assistance provided by Telesto to Daphnis, including the lease of military bases and the sale of advanced technology aircraft, missile systems and naval vessels.

5. Both Telesto and Fornjot have invested heavily in the deployment of governmental satellite constellations in low Earth orbit. In particular, Telesto has launched:

- (i) the *Tarvos* series of 36 satellites deploying a global positional and navigational system;
- (ii) the *Narvi* series of 72 satellites deploying a mobile satellite communications system; and
- (iii) the *Paaliaq* series of 34 satellites deploying a high-resolution remote sensing system.

6. The *Tarvos* system is owned and controlled by the Government of Telesto, which contracted out its manufacturing to Dione Satellite Corporation (DSC), a privately-owned company incorporated in Telesto of which all of its shareholders are private individuals or firms of Telestoese nationality. The satellites were launched by Farbauti Aerospace International Limited (FAI), a launch services company in Telesto that is majority-owned by the Government

of Telesto, with the remaining shares held by private interests of Telestoese nationality. All of the *Tarvos* series, except for *Tarvos-24* and *Tarvos-39*, were launched from a facility owned by FAI that was located in Daphnis.

7. *Tarvos-24* and *Tarvos-39* were launched from Telesto when the facility in Daphnis was being refurbished to comply with new safety standards imposed under Daphnisan law.

8. The Government of Telesto uses the *Tarvos* system exclusively for its own use, including both non-military and military applications. The Government of Telesto has an equal interest in the *Albiorix* global positioning and navigational system, which is a joint venture between the Governments of Daphnis and Telesto. The system, which is inferior in accuracy to *Tarvos*, was built entirely by DSC in Daphnis and launched by FAI in Telesto. It is operated commercially and is made available for use in Telesto, Daphnis and other States.

9. The satellites of the *Narvi* and the *Paaliaq* systems were all built by DSC and launched by FAI in Telesto. The systems are both owned and operated by the Government of Telesto for its own exclusive governmental use, including both military and non-military applications.

10. The Government of Fornjot does not own or operate similar systems exclusively for its own use. However, it has access to the following satellite systems:

- (i) the *Ijiraq* series of 32 satellites deploying a global positioning and navigation system;

(ii) the *Kari* series of 18 satellites deploying a global mobile communications system; and
 (iii) the *Bebhionn* series of 24 satellites deploying a high-resolution remote sensing system.

11. The *Ijiraq* system is owned and operated by Iapetus & Co., a commercial venture that is majority owned by the Government of Fornjot and the other shareholders are private interests of Fornjotian nationality. The Government of Fornjot has contracted with Iapetus for access to all three satellite systems for its military and non-military use.

12. Under the 2014 Convention of Eternal Friendship, Cooperation and Partnership in Peace (the Skoll Convention) signed in Skoll, Telesto, between Telesto and its core allies, including Daphnis, which is granted access and use of both the *Narvi* and the *Paaliaq* systems and their associated technology for an annual charge payable to Telesto. Further, Telesto is given access to all military installations and bases in Daphnis for the deployment of its air force, missile systems and naval vessels.

13. The Skoll Convention entered into force on 3 February 2015.

14. The Government of Daphnis immediately began adapting its military forces to the *Narvi* system, which provided a superior communications capability, particularly for encrypted communications, than the *Kari* system that was available to the military forces of Fornjot. Similarly, the *Paaliaq* system has provided Daphnis with real-time remote sensing imagery of far superior quality than that available to Fornjot from the *Bebhionn* system.

15. Fornjot strongly objected to the Skoll Convention, in particular the access to the military satellite systems given to Daphnis by Telesto. It perceives this as a threat to the national security of Fornjot, especially as skirmishes continue between Fornjot and Daphnis along their borders. Repeated protests through bilateral diplomatic channels between Fornjot and Telesto were ignored. The Security Council, General Assembly, Conference on Disarmament and Committee on the Peaceful Uses of Outer Space of the United Nations all declined to take any action, despite much diplomatic effort on the part of Fornjot.

16. Since the Skoll Convention entered into force, Daphnis has enjoyed substantially more success in its irregular military skirmishes against Fornjot. On 29 November 2015, Fornjot deployed a large naval fleet with the intention of destroying the Daphnis Navy in a surprise attack. However, the attack was unsuccessful as access to the *Paaliaq* system enabled Daphnis to be forewarned of the attack and had precise locations of each of the Fornjotian vessels for missile targeting purposes, with the active assistance of Telestoese military aircraft, vessels and personnel. After the battle, Telesto deployed ground-based anti-missile rocket systems and short-range nuclear missiles in Daphnis. These are technological and military capabilities that Daphnis did not have prior to the Skoll Convention.

17. Now with evidence that access to the *Narvi* and *Paaliaq* systems is a serious threat to the national security of Fornjot, especially if serious armed conflict broke out between it and Daphnis in the future, Fornjot decided to deploy an anti-satellite weapon system, called *Hyperion*, with the capability of destroying the *Tarvos*, *Narvi* and *Paaliaq* satellite systems. In addition, Fornjot decided also to deploy a space-based missile warning and defence system, called *Rhea*. The *Hyperion* and the missile defence component of *Rhea* are designed to lock onto missiles heading towards Fornjot or a targeted satellite and destroying them with a combination of laser and projectile weapon systems. The *Hyperion* and the *Rhea* were to be deployed gradually in low Earth orbit from August 2016 until their completion in December 2022 through a combination of manned and unmanned launch vehicles.

18. Telesto and Daphnis strongly protested the deployment of the *Hyperion* and the *Rhea* and, with the sanction of the United Nations Security Council, began an embargo of the supply of advanced satellite and launch vehicle components and laser systems to Fornjot. This has forced Fornjot to manufacture most of the components it needs for both satellite systems, significantly increasing the costs of their deployment and further increased tensions between the States.

19. On 11 November 2017, the Fornjotian manned reusable launch vehicle *Bergelmir*,

carrying a crew of nine, had to make an emergency de-orbit and return to the Earth after its life support system was damaged after a collision with a microscopic piece of space debris. At that time, it had deployed the *Hyperion-16* and *Hyperion-23* satellites, but the *Hyperion-24* satellite was still onboard. The *Bergelmir* made an emergency landing at an air force base in Telesto where some of the strategic nuclear bombers of Telesto were based. Telesto refused to return the crew, the *Hyperion-24* or the *Bergelmir* to Fornjot, despite repeated requests by Fornjot through diplomatic channels, and charged the crew members with espionage. After a public trial, the crew members were convicted and sentenced to life in prison.

20. On 18 September 2018, a Telestoese spacecraft called *Janus*, carrying the President of Telesto and the Federal Chancellor of Daphnis, was returning to Earth after a brief six-hour visit to the International Space Station. The *Janus* was returning to Daphnis where the President of Telesto was to make a state visit for the following three days. Mistaking the *Janus* for an intercontinental ballistic missile fired from Telesto towards Fornjot, the *Rhea* system alerted ground-based systems in Fornjot, which automatically fired one of its ground-based missiles at the spacecraft, destroying it during its re-entry through the Earth's atmosphere. Images from both the *Paaliaq* and the *Bebhionn* systems at the time revealed that the *Janus* was destroyed one hundred (100) kilometres directly above the large island of Mundilfari in Fornjot. Debris from the *Janus* then collided with and destroyed the *Tarvos-9* and *Tarvos-24* satellites.

21. Outraged at what it perceived as an armed attack on one of its spacecraft and the intentional assassination of its President, the Government of Telesto ordered immediate retaliation. On 19 September 2018, Telesto launched a large-scale attack from ground-based missiles located in Telesto and Daphnis, destroying most of the satellites of the *Rhea* and *Ijiraq* systems.

22. Fornjot responded on 20 September 2018 by bombing military bases in Daphnis where Telestoese military aircrafts and personnel were based and using the *Hyperion* satellite system to destroy seven satellites of the *Tarvos* constellation.

23. However, before further attacks were launched by either Fornjot or Telesto, the United Nations Security Council mandated a cease-fire that came into effect on 21 September 2018. The Secretary-General of the United Nations began mediating between the three States. Eventually, Fornjot and Telesto agreed to refer their dispute to the International Court of Justice. Similarly, Fornjot and Daphnis agreed to refer their boundary dispute and other liability issues to the International Court of Justice in separate proceedings.

24. Fornjot contends that:

- (i) Telesto contravened international law by refusing to promptly return to Fornjot the *Bergelmir*, its cargo and its crew;
- (ii) Telesto contravened international law by the military use of satellite systems by Telesto and later by Daphnis pursuant to the Skoll Convention; and
- (iii) Telesto is liable for the destruction of the *Rhea* and *Ijiraq* satellite systems.

25. Telesto contends that:

- (i) Fornjot contravened international law by deploying the *Hyperion* and the *Rhea* satellite systems in low Earth orbit;
- (ii) Fornjot is liable for the destruction of the *Janus* and the *Tarvos-9* and *Tarvos-24* satellites and for the deaths of the individuals onboard the *Janus*; and
- (iii) Fornjot is liable for the destruction of the seven *Tarvos* satellites by the *Hyperion*.

26. In addition to the specific claims advanced by Fornjot and Telesto, each party has specifically denied the claims asserted by the other. Thus, Telesto has denied that its refusal to return the *Bergelmir*, its cargo and its crew was contrary to international law; that its use (or that of Daphnis) of certain satellites pursuant to the Skoll Convention contravened international law; and that it was liable for the destruction of the *Rhea* and *Ijiraq* satellite systems. Similarly, Fornjot has denied that its deployment of the *Hyperion* and *Rhea* satellite systems contravened international law; that it was liable for the destruction of the *Janus* and the *Tarvos-9* and *Tarvos-24* satellites, or for the deaths of the individuals onboard the *Janus*; and that it was liable for the destruction of seven *Tarvos* satellites by the *Hyperion*.

27. Fornjot and Telesto are members of the United Nations, the Conference on Disarmament and the International Atomic Energy Agency. Fornjot and Telesto are both parties to the Outer Space Treaty, the Rescue Agreement, the Liability Convention and the Registration Convention. Fornjot has signed but not ratified the Vienna Convention on the Law of Treaties, while Telesto has not signed it.

Statement of Additional Facts

1. The *Janus* was launched from Telesto.
2. Similar to the *Ijiraq* series of satellites, the *Kari* series and the *Bebhionn* series of satellites were owned by commercial ventures that are majority owned by the Government of Fornjot and the other shareholders being private interests of Fornjotian nationality. However, following the global financial depression that began in 2008, the company operating the *Kari* series of satellites was forced to sell a minority stake in its shares to a combined investment vehicle of a number of hedge funds in Daphnis.
3. The battle referred to in paragraph 16 took place in international waters.
4. The repeated requests made by Fornjot through diplomatic channels as referred to in paragraph 19 included protests made to the Secretary-General, President of the General Assembly and the President of the Security Council of the United Nations.
5. Both Fornjot and Telesto are party to the Registration Convention and have at all relevant times considered themselves to have been fully compliant with its provisions.

PART C: FINALISTS BRIEFS

MEMORIAL FOR THE APPLICANT THE PRINCIPALITY OF FORNJOT

Georgetown University, USA (Ms. Christina Calce and Ms. Lorinda Laryea; Coach: Prof. Paul Larsen).

ARGUMENT

I. Telesto violated the Outer Space Treaty and the Rescue Agreement when it refused to return the Bergelmir, its cargo or crew despite Fornjot's repeated requests.

A. Telesto's refusal to return the Bergelmir crew violates the Rescue Agreement, which compels a virtually unconditional right of return for astronauts.

The Outer Space Treaty stipulates that Treaty members shall "regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party..." and that "when astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle."¹ The 1969 Rescue Agreement, designed to elaborate upon the 1967 Principles Treaty,² specifies that

¹ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies art. V, *opened for signature* Jan. 27, 1967, 610 U.N.T.S. 205 [hereinafter *OST*].

² Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space, *opened for signature* April 22 1968, 672 U.N.T.S. 119 [hereinafter *Rescue Agreement*]. The Rescue Agreement grew from an international consensus that the *OST* insufficiently addressed all situations regarding the safety of spacecraft and astronauts. See CARL Q. CHRISTOL, THE

spacecraft personnel who land in foreign territory due to “accident, distress, emergency, or unintended landing” are to be “safely and promptly returned to representatives of the launching authority.”³

States Party to the Rescue Agreement’s drafting expressly rejected language permitting a landing State to determine whether or not to return astronauts.⁴ The Soviet Union’s preliminary draft of the Agreement permitted the landing state to establish whether foreign astronauts were engaged in espionage-related activities before returning them to their state of launch.⁵ Several other States indicated that the right of return should only apply to astronauts forced to make an emergency landing while engaged in peaceful activities.⁶ Alternately, the American proposal mandated that astronauts forced to make an emergency landing were to be “safely and promptly returned” to their launching authority without regard to the type of activities in which they were engaged.⁷ The

Soviet Union and other States ultimately accepted the American proposal, creating a presumption in favor of returning astronauts to their launching State.⁸

Fornjot’s situation fulfills all other requirements for the return of astronauts and objects. The Rescue Agreement’s plain language asserts that the right of return applies to all astronauts who are the “personnel of a spaceship” and land due to “accident, distress, emergency, or unintentional landing.”⁹ The Bergemir crew were “personnel of a spaceship” engaged in the operation of the Bergemir, and their landing was due to an emergency situation caused by space debris.¹⁰ The Bergemir is a spaceship under the terms of the Agreement, even though the Agreement does not explicitly define the term “spaceship.” When a treaty does not explicitly define a term, the treaty language may be interpreted according to its purpose and ordinary language.¹¹ The Oxford English Dictionary defines spacecraft as “a vehicle designed to travel in space.”¹² The OST, upon which the Rescue Agreement is based,

MODERN INTERNATIONAL LAW OF OUTER SPACE 153-60 (Pergamon Press 1982).

³ *Rescue Agreement*, *supra* note 2, art. IV.

⁴ *See generally* Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space: Texts of Records (1964-67), *reprinted in* NANDASIRI JASENTULIYANA & ROY S. K. LEE, MANUAL ON SPACE LAW, VOLUME III, 159-97 (Oceana Publications 1981).

⁵ Draft International Agreement on the Rescue of Astronauts and Spaceships Making Emergency Landings, U.N. Doc A/AC.105/C.2/L.2, June 6 1962 *reprinted in* NANDASIRI JASENTULIYANA & ROY S. K. LEE, MANUAL ON SPACE LAW, VOLUME III, 112 (Oceana Publications 1981).

⁶ Japan, Mexico, Lebanon, and Iran all suggested that a contracting State should not be required to return astronauts if it found that they were engaged in “nonpeaceful” acts. M.J. PETERSON, INTERNATIONAL REGIMES FOR THE FINAL FRONTIER 82 (State University of New York Press, 2005).

⁷ Draft International Agreement on Assistance to and Return of Astronauts and Objects Launched into Outer Space, U.N. Doc A/Ac.105/C.2/L.9, March 9 1964 *reprinted in* NANDASIRI

JASENTULIYANA & ROY S. K. LEE, MANUAL ON SPACE LAW, VOLUME III, 116 (Oceana Publications 1981).

⁸ Peterson, *supra* note 6, 86. *See also* Christol, *supra* note 2, 193 (stating that Austria and France reserved a right to refuse to return astronauts when such astronauts requested asylum.) This reservation is irrelevant here because none of the Bergemir crew requested asylum.

⁹ *Rescue Agreement*, *supra* note 2, art. 4.

¹⁰ Special Agreement between Principality of Fornjot and Republic of Telesto (May 2, 2019) ¶19 [hereinafter *Compromis*].

¹¹ Vienna Convention on the Law of Treaties art. 31 ¶1, *opened for signature* May 23, 1969, 1155 U.N.T.S. 331 [hereinafter *VCLT*]. The *VCLT* is not directly applicable because it was signed after the *OST* and *Rescue Agreement* came into force. *VCLT* art. 4. However, it is applicable as customary international law. *See* Territorial Dispute (Libya v. Chad), 1994 I.C.J. 6, 21 (Feb. 4); *Kasikili/Sedudu Island (Bots. v. Namib.)*, 1999 I.C.J. 1045, 1059 (Dec. 13).

¹² “Spacecraft,” Oxford English Dictionary (3d ed. 2009).

repeatedly refers to a space object as an object which enters earth orbit or is launched into outer space.¹³ Both definitions indicate that the Rescue Agreement's framers intended to protect objects launched with the intention of reaching orbit; because Fornjot launched the Bergelmir with the intent that it would reach orbit, it is a protected spaceship. Accordingly, the Rescue Agreement guarantees the Fornjotian government prompt return of the Bergelmir crew.

Telesto improperly contends that because it convicted the Fornjotian astronauts of espionage it may retain custody of them. As noted in the Draft Articles on Responsibility of States for Internationally Wrongful Acts, a State responsible for a wrongful act may not rely on internal law as a justification for its action.¹⁴ No internationally accepted definition of espionage exists; the Telestoese law of espionage might diverge sharply from that of other nations. Accordingly, even if Telesto's domestic law stipulates that the act of landing in Telesto's territory is espionage, this alone does not justify its decision to retain the Bergelmir crew.

B. Telesto's refusal to return the Bergelmir or Hyperion-24 violates the Rescue Agreement because the Bergelmir and Hyperion are both space objects which landed in distress.

The Rescue Agreement provides for return of space objects which land in foreign

¹³ See *OST*, *supra* note 1, art. IV, art. VIII.

¹⁴ Draft Articles on Responsibility of States for Internationally Wrongful Acts, G.A. Res. 56/83, Annex, U.N. GAOR, 56th Sess., U.N. Doc. T A/RES/56/83, Article XXXII (2001) [hereinafter "Draft Articles on Responsibility of States" or "Draft Articles"]. The Draft Articles are codifications of customary international law and were adopted by the International Law Commission in 2001. *Report of the International Law Commission to the General Assembly on Its Fifty-Third Session*, U.N. GAOR, 53rd Sess., Supp. No. 10, ¶¶69-77, U.N. Doc. A/56/10 (Aug. 10, 2001). In addition, this Court has cited drafts of the Articles on several occasions. See, e.g., *Gabčikovo-Nagymaros Project* (Hungary/Slovakia), 1997 I.C.J. 7, 55 (Sept. 25).

territory. The Agreement does not indicate that a State may keep such an object when it believes the object may be related to espionage; in fact, States Party to the Rescue Agreement rejected language which would have enabled a State to retain foreign space objects containing espionage technology. Article 7 of the first Soviet draft of the Rescue Agreement stipulated that objects would only be returned to the launching State when they did not contain "devices ... for the collection of intelligence information in the territory of another State."¹⁵ Alternately, the American draft did not suggest any instances in which a State could justify refusal to return a space object which landed in its territory, but did suggest that costs related to recovery and return of an object should be borne by the launching State.¹⁶ The final Agreement incorporates the American-recommended provisions regarding costs¹⁷ and hazardous material,¹⁸ but does not incorporate the Soviet proposal to limit return of intelligence devices. The omission of such limitations indicates that absent hazardous material, or refusal of the launching State to pay expenses related to rescue and return efforts, the landing State must return the objects in question.

Current practice reflects a strong preference for return of space objects which land in foreign territory. As of 2009, the Registry of the U.N. Office of Outer Space Affairs listed over 60 objects which landed foreign territories; in all cases, the States of landing returned the objects to the launching State.¹⁹ Similarly, when Kazakh officials refused to return a Russian Soyuz rocket which landed in Kazakhstan in

¹⁵ Draft International Agreement on the Rescue of Astronauts and Spaceships Making Emergency Landings, *supra* note 5.

¹⁶ Draft International Agreement on Assistance to and Return of Astronauts and Objects Launched into Outer Space, *supra* note 7.

¹⁷ *Rescue Agreement*, *supra* note 2, art. 5 ¶5.

¹⁸ *Rescue Agreement*, *supra* note 2, art. 5 ¶4.

¹⁹ United Nations Office for Outer Space Affairs, List of Reported Space Objects Discovered by Member States within their Territories, <http://www.ootsa.unvienna.org/ootsa/natact/sdnps/unlfd.html> (last visited 29 February 2009).

1994, their refusal was met with widespread condemnation.²⁰

None of the restrictions of Article 5 of the Rescue Agreement apply to the instant case. First, neither object contains hazardous material. To be considered hazardous, an object must contain some type of nuclear or similar material that poses an immediate, physical threat to the surrounding area.²¹ Furthermore, costs are not in dispute.²² Accordingly, because the Bergemir and Hyperion are space objects protected by the Rescue Agreement, and because none of the Agreement's exceptions apply, Telesto should return them to Fornjot.

C. Public Policy supports requiring the return of Fornjot's astronauts and space objects.

The Rescue Agreement preamble expresses a desire to encourage international cooperation in the exploration of outer space;²³ the OST similarly encourages States to pursue exploration and research in outer space. States are considerably less likely to pursue such exploration if they cannot be assured that international law protects the resources they expend in such exploration.

Furthermore, even if a landing State questions the motives of spacecraft personnel who land in its territory, it is inappropriate for that State to try the personnel under its domestic law. Even if the trial is open and public, without an impartial international body to adjudicate

²⁰ NATHAN C. GOLDMAN, *AMERICAN SPACE LAW: INTERNATIONAL AND DOMESTIC* 79. (Univeldt 2nd Ed. 1996).

²¹ See Settlement of Claim between Canada and the Union of Soviet Socialist Republics for Damage Caused by "Cosmos 954" ¶ 15 (Released on April 2, 1981), available at http://www.jaxa.jp/library/space_law/chapter_3/3-2-2-1_e.html (ordering the U.S.S.R. to pay Canada C\$3 million in damages related to a satellite which unintentionally de-orbited, landed in Canada, and shed radioactive debris throughout Canada's northwestern territory).

²² The Compromis does not indicate that Fornjot refused to pay costs associated with the return of the objects.

²³ *Rescue Agreement*, *supra* note 2, preamble.

such a trial there can be no assurance that the defendants will be treated fairly. Furthermore, it is possible that the landing state's domestic law will be highly protective of domestic persons and highly condemning of foreigners. As a result, States who launch manned vehicles cannot be assured that their personnel will be treated fairly in the event of an unintentional landing in foreign territory. This situation will discourage States from launching manned vehicles and will hamper space research and exploration.

II. Telesto violated the OST, the U.N. Charter, and the Conference on Disarmament when it granted Daphnis access to advanced military technology.

A. Telesto improperly granted Daphnis access to Paaliaq and Naarvi when it could anticipate that such technology would grant Daphnis military superiority over Fornjot and lead to an arms race between the two nations.

The OST asserts that "the common interest of all mankind" requires that the exploration and use of outer space be reserved for "peaceful purposes"²⁴ and that States conduct space activities "in the interest of maintaining international peace and security and promoting international cooperation and understanding."²⁵ By "all mankind," the treaty references the common interest of humanity as a whole, paralleling the U.N. Charter's assertion that the U.N.'s goals are to "employ international machinery for the promotion of the economic and social advancement of all peoples."²⁶ An arms race is not in the interest of all mankind because it increases tensions between States and destabilizes world security.²⁷

²⁴ *OST*, *supra* note 1, preamble.

²⁵ *OST*, *supra* note 1, art. III.

²⁶ *OST*, *supra* note 1, preamble.

²⁷ See U.N. Inst. for Disarmament Research, *Satellite Warfare, a Challenge for the International Community*, p. 19, U.N. Doc. UNIDIR/87/4 (Dec. 1987)(affirming that an arms race in outer space "constitutes henceforth an undoubted threat to the safety of space

Ample evidence suggests that Telesto knew that granting advanced space technology to Daphnis would lead to a military arms race between the Daphnis and Fornjot. First, Daphnis and Fornjot had a history of naval and air force skirmishes.²⁸ Second, Daphnis indicated a willingness to use the Paaliaq and Narvi systems in an armed conflict when it updated its military to use the technologies as soon as it gained access to them.²⁹ Finally, Telesto knew that the Narvi and Paaliaq systems provided Daphnis with stronger communications and remote sensing capabilities than those available to Fornjot. It should have realized that greater capabilities in space, particularly in the field of remote sensing, lead to military superiority.³⁰ As such, Telesto should have anticipated that its actions would grant Daphnis superiority over Fornjot, force Fornjot to further its own defense, and lead to an arms race inapposite to the OST's goal that space be used for the benefit of all mankind.

B. Telesto violated the OST's prohibition against non-peaceful uses of space when it permitted Daphnis to use Paaliaq in armed conflict.

The OST limits the use of outer space to "exclusively ... peaceful purposes."³¹ Two possible interpretations of the term peaceful are

systems and could in particular jeopardize the development of peaceful uses of space by third countries"); Second U.N. Conference on the Peaceful Uses of Outer Space, *Unispace Report*, ¶522-24, U.N. Doc. A/Conf.101/iO, (Aug. 1982) ("The extension of an arms race in outer space ... is detrimental to humanity as a whole and therefore must be prevented.").

²⁸ Compromis ¶3. Because Telesto had already increased Daphnis' technological capabilities by providing it with advanced aircraft, missile systems, and naval vessels, Daphnis and Fornjot fought such skirmishes with equal technology.

²⁹ Compromis ¶14.

³⁰ Michel Bourbonnière, *The Ambit of the Law of Neutrality and Space Security*, 49 I.I.S.L. Colloquium 326, 327 (Oct. 2006).

³¹ *OST*, *supra* note 1, art. IV.

"non-military" and "non-aggressive."³² Because the treaty does tolerate space-based military equipment such as reconnaissance satellites, the definition cannot be non-military.³³ However, even if the treaty tolerates some military activity in space, this Court should not permit states to use space technology in physical armed conflict, as such activities could potentially lead to severe destruction on Earth which would be neither for the benefit of nor in the interest of humanity.³⁴

Daphnis' use of Paaliaq was a tactical use of military weaponry in armed conflict. The Oxford English Dictionary defines weapon as an object "designed for use in fighting or struggling."³⁵ Paaliaq was an integral part of Daphnis' fight against Fornjot's forces: Daphnis did not just use it for reconnaissance purposes but relied on it to target and attack specific Fornjotian vessels in international waters.³⁶ Accordingly, even if Paaliaq had non-military

³² Non-military implies that the use would have no military applications; non-aggressive permits some military use, such as for reconnaissance missions. See Christopher M. Petras, *The Use of Force in Response to Cyber-Attack on Commercial Space Systems*, 67 J. Air L. & Com. 1213, 1251-53 (Fall 2002).

³³ See M.N. ADEM, *Implementation of Article IV of the Outer Space Treaty of 1967 During the 21st Century*, 40 I.I.S.L. Colloquium 338, 344 (1998) (explaining that the United States and Soviet Union both launched reconnaissance satellites shortly after the signing of the *OST* and that reconnaissance satellites were used to verify the Strategic Arms Limitation Treaty [hereinafter *SALT*]).

³⁴ See generally Robert A. Ramey, *Armed Conflict on the Final Frontier: The Law of War in Space*, 48 Air Force Law Review 1, 19-29 (2000) (detailing weaponry which, if used from space, could severely negatively impact Earth's environment and devastate humanity); see also Principles relating to remote sensing of the Earth from space, G.A. Res. 41/65 (Dec. 3, 1986), Principle IV ("remote sensing activities... shall be carried out for the benefit and in the interests of all countries.").

³⁵ "Weapon," Oxford English Dictionary (3d ed. 2009).

³⁶ Compromis ¶16.

applications, in the instant context it was used solely in a tactical military fashion.

Telesto is responsible for Daphnis' actions even though Daphnis, not Telesto, used Paaliaq in an illegal fashion.³⁷ Under the OST, a space object's state of registration "shall retain jurisdiction and control over such object ... while in outer space or on a celestial body."³⁸ Similarly, a launching State is internationally liable for damage caused by its space object.³⁹

Under the Registration Convention, a launching State is a State which procures the launching of an object or from whose territory such an object is launched.⁴⁰ Because the object was launched from Telesto and under Telesto's control, and because Telesto is party to the Registration Convention, it is reasonable to assume that Telesto registered Paaliaq. As such, the object was under Telesto's jurisdiction and

³⁷ The fact that Telesto permitted Daphnis to use such destructive technology might itself violate international law. Both Telesto and Fornjot are members of the International Atomic Energy Agency [IAEA]. The IAEA Treaty on the Non-Proliferation of Nuclear Weapons states that "Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly." Treaty on the Non-Proliferation of Nuclear Weapons art. 1, *opened for signature* June 12, 1968, 729 U.N.T.S. 161. While the instant case does not directly implicate this treaty because neither the Paaliaq nor Narvi are nuclear weapons, it is relevant by analogy because the ultimate goal of both this treaty and the "peaceful purposes" of the *OST* is to limit the danger posed by highly destructive weaponry. Where this treaty seeks to limit the likelihood that nuclear weapons will severely harm humanity, the *OST* seeks to prevent space based weaponry from doing so.

³⁸ *OST*, *supra* note 1, art. VIII.

³⁹ *OST*, *supra* note 1, art. VII.

⁴⁰ Convention on Registration of Objects Launched into Outer Space art. I, *opened for signature* Sept. 15, 1976, 1023 U.N.T.S. 15 [hereinafter *Registration Convention*].

Telesto is responsible for damage inflicted through it.

C. Telesto cannot justify Paaliaq's use under a theory of self-defense because Daphnis did not specifically request Telesto's aid and because the use of Paaliaq was neither necessary to defend Daphnis nor proportional to the threat posed.

The U.N. Charter generally prohibits the use of force by one State against another,⁴¹ but Article 51 of the Charter provides a State with limited permission to use armed force in self-defense if it is physically attacked.⁴² An unrelated State may act on behalf of the threatened State only when the threatened State specifically requests assistance for the particular situation at hand.⁴³ In *Nicaragua v. U.S.*, America defended its decision to arm and train Contras in El Salvador because the Organization of American States Charter required all States Party to act in collective self-defense when any State Party to the Charter was attacked, and because Nicaragua threatened El Salvador, which was Party to the Charter.⁴⁴ The Court found this justification insufficient because El Salvador had not requested American assistance in response to any particular incident.⁴⁵ Similarly, Telesto assisted Daphnis based on the provisions of the Skoll Convention; Daphnis never specifically requested Telesto's aid in regard to the 29 November 2015 skirmish. Because Telesto acted without such a request, Article 51's "collective self defense" provision cannot apply.

Furthermore, a state may only resort to armed force in self-defense when such force is necessary.⁴⁶ Armed force is only necessary when a State has no other resources through

⁴¹ U.N. Charter Art.2, para. 4.

⁴² U.N. Charter Art.51.

⁴³ *Military and Paramilitary Activities (Nicar. v. U.S.)*, 1986 I.C.J. 14, 105 ¶199 (June 27, 1986) [hereinafter "*Nicaragua v. U.S.*"].

⁴⁴ *Id.* at 104-105, 196-99.

⁴⁵ *Id.*

⁴⁶ *Id.* at 103.

which to stop an imminent attack.⁴⁷ The Fornjotian navy was in international waters when Daphnis used Paaliaq against it. Fornjot's skirmish with Daphnis had not yet begun, nor had Fornjot reached Daphnisian territory. Accordingly, Telesto had time to pursue alternate methods of stopping the attack. It should have pursued a diplomatic resolution rather than permitting Daphnis to use Paaliaq in armed conflict.

Finally, the type of military force used in self-defense must be proportional; that is, States "must not exceed in manner or aim the necessity provoking them."⁴⁸ By using Paaliaq to target missiles, Daphnis employed a manner of warfare significantly more powerful than that available to Fornjot. In previous skirmishes, Daphnis relied on technology equal to that of Fornjot.⁴⁹ No compelling reason existed for Telesto and Daphnis to use Paaliaq to target missiles when non-space based technology could have accomplished the same purpose. Accordingly, Telesto improperly permitted Daphnis to use Paaliaq when such use was unnecessary to repel the type of threat allegedly posed by Fornjot, and it applied a significantly stronger military force than that accessible to Fornjot.

III. Telesto caused and is liable for the destruction of the Rhea and Ijiraq

⁴⁷ See Petras, *supra* note 32, at 1261; Jackson Maogoto and Steven Freeland, *The Final Frontier: The Laws of Armed Conflict and Space Warfare*, 23 Conn. J. Int'l L. 165, 176-77 (Winter 2007)(citing FREDERIC DE MULINEN, HANDBOOK ON THE LAW OF WAR FOR ARMED FORCES 82-83 (Int'l Comm. Of the Red Cross, 1987)).

⁴⁸ Oscar Schachter, *The Right of States to Use Armed Force*, 82 Mich. L. Rev. 1620, 1637 (1984).

⁴⁹ The 20 November 2015 incident was the first to occur since Daphnis gained access to the Paaliaq and Narvi systems through the Skoll Convention; accordingly, in any previous skirmishes, Daphnis would have had access only to the aircraft, missile systems, and naval vessels provided by Telesto, which equaled the military power available to Fornjot. Compromis ¶12-16.

systems; because neither system threatened Telesto, it was not acting in self-defense.

A. Telesto is liable for the damage to the Rhea and Ijiraq systems under the Liability Convention because it intentionally caused their destruction.

A launching State is liable for damage caused in outer space when the damage is attributable to its fault or the fault of persons for whom it is responsible.⁵⁰ The Liability Convention's drafters implemented this fault-based liability regime because space is an inherently dangerous place, and nations who choose to place objects in it must accept the risk of doing so.⁵¹ The standard enables States to have recourse against each other only "if fault can be proved on the part of the operator of one of the space objects involved in the collision."⁵²

The application of fault-based liability in space derives in part from maritime law, wherein a ship will only be liable in the event of a collision if its failure to adhere to the rules of navigation are the proximate cause of the damage inflicted.⁵³ Similarly, a launching State will be at fault for damage caused by its space object to another space object only if the damage results from its failure to adhere to the law of

⁵⁰ Convention on International Liability for Damage Caused by Space Objects art. III, *opened for signature*, Mar. 29, 1972, 961 U.N.T.S. 187 [hereinafter *Liability Convention*]. This Convention was intended as a clarification of the *OST* Art. VI, under which States Party to the *OST* agree to accept responsibility for national activities carried out in outer space.

⁵¹ MANFRED LACHS, *THE LAW OF OUTER SPACE* 126 (A.W. Sijthoff 1972).

⁵² RENE LEFEBER, *TRANSBOUNDARY ENVIRONMENTAL INTERFERENCE AND THE ORIGIN OF STATE RESPONSIBILITY* 161 (Martinus Nijhoff, 1996).

⁵³ For example, a State may be liable for damage caused when its ship fails to take due care when encountering fog. Marc S. Firestone, *Problems in the Resolution of Disputes Concerning Damage Caused in Outer Space*, 59 Tulane L. Rev. 747, 770 (Jan. 1985).

outer space. The body of law pertaining to the use of outer space is codified in the OST. Under Article III of the OST, States agree to use outer space in accordance with the U.N. Charter,⁵⁴ which prohibits a State from using force against another State.⁵⁵ The instant case is a clear example of intentional force used against another State. Telesto intended to use force to destroy the Rhea and Ijiraq systems. The destruction of both objects was foreseeable, and ultimately, such destruction did occur. As such, by launching missiles with an intent to destroy the objects, Telesto must be liable for their destruction.⁵⁶

Telesto is also at fault under the Draft Articles on Responsibility of States for Internationally Wrongful Acts.⁵⁷ Under the Draft Articles, a State is liable for “an injury caused by an internationally wrongful act.”⁵⁸ A State’s act is internationally wrongful if the act is attributable to the State in question and if the act

⁵⁴ *OST*, *supra* note 1, art. III.

⁵⁵ U.N. Charter Art.2 para. 4.

⁵⁶ It is irrelevant that Telesto used ground-based missiles to destroy Rhea and Ijiraq. Because missiles entered space prior to the destruction of Rhea and Ijiraq, they are space objects for purposes of the *Liability Convention* Art. III. See §I(B), *supra*. Similarly, it is irrelevant that both Telesto and Daphnis launched the missiles in question. Under Art. V of the *Liability Convention*, Telesto and Daphnis would be jointly and severally liable for the destruction, and Fornjot may hold either Telesto or Daphnis liable. See MORRIS D. FORKOSCH, OUTER SPACE AND LEGAL LIABILITY 80-81 (Martinus Nijhoff 1982) (describing a situation in which State C’s space object is injured by an object jointly launched by States A and B: “C claims as against A and B regardless of which one is primarily responsible, whereas A and B can (hereafter) argue this as among themselves.”).

⁵⁷ *Draft Articles on Responsibility of States*, *supra* note 14, art. I. See also Christol, *supra* note 2, at p. 117 (noting that regardless of whether the Liability Convention applies, States must still adhere to customary international law on liability.)

⁵⁸ *Draft Articles on Responsibility of States*, *supra* note 14, art. XXI.

constitutes a breach of the State’s international obligations.⁵⁹

A court may attribute an action to a State if it finds that the action could not have occurred without the State’s involvement.⁶⁰ In the Corfu Channel case, the Court held that landmine damage to British ships was attributable to Albanian forces when the landmines could not have been planted without the Albanian military’s knowledge.⁶¹ Similarly, in the instant case, the Telestoese government has admitted knowledge of – and in fact causing – the destruction of the Rhea and Ijiraq systems.⁶²

An act constitutes a breach of the State’s international obligations if it violates a treaty obligation or is otherwise contrary to the rights of another State.⁶³ In the instant case, Telesto was bound by the U.N. Charter to not use force against another State; Fornjot was guaranteed that its property would be protected from armed attack.⁶⁴ By using missiles to destroy Fornjotian property, Telesto violated this treaty right and breached its international obligation. Accordingly, under fault-based liability, Telesto is liable for the damage to the Rhea and Ijiraq systems.

B. Telesto cannot justify actions under a theory of self-defense because neither the Rhea nor the Ijiraq system posed an immediate threat to Telesto.

Article 51 of the U.N. Charter grants a limited right to self-defense in the case of an armed attack; more recently, some scholars have indicated that this right might include the right to self-defense in light of an anticipated threat.⁶⁵

⁵⁹ *Draft Articles on Responsibility of States*, *supra* note 14, art. II.

⁶⁰ *Draft Articles on Responsibility of States*, *supra* note 14, art. II commentary, ¶4.

⁶¹ Corfu Channel (U.K. v. Alb.), Merits, 1949 I.C.J. 4, 22-23 (April 9, 1949).

⁶² Compromis ¶21.

⁶³ *Draft Articles on Responsibility of States*, *supra* note 14, art. II, commentary, ¶7 – 8.

⁶⁴ U.N. Charter Art. 2 para. 4.

⁶⁵ See Petras, *supra* note 32 at 1245-46 (noting that the drafting history of the U.N. Charter

However, even if Article 51 does permit anticipatory self-defense, a State may only take action if the alleged threat poses an immediate risk of harm: “the provision of weapons or logistical or other support” alone do not amount to an “armed attack.”⁶⁶

In the instant case, neither the Rhea nor the Ijiraq imminently threatened Telesto. The Rhea was designed to engage only when an unauthorized object moved below 100km above Fornjot’s territory or when a missile targeted a Fornjotian satellite.⁶⁷ It could not fire upon any earth based installation or object.⁶⁸ Following the Janus incident, no Telestoese space objects were poised to enter Fornjotian airspace or approach Fornjotian satellites. Accordingly, the Rhea did not threaten any Telestoese property. Similarly, the Ijiraq system could not have posed an immediate threat because it merely provided global position and navigation services and Fornjot had never used it for military purposes. Because neither system posed an immediate threat to Telesto or its property, Article 51 does not justify Telesto’s actions.

C. Even if Article 51 does apply, Telesto remains liable for the destruction of Rhea and Ijiraq because it violated the law of armed conflict by disregarding the principles of discrimination, proportionality, and military necessity.

A State violates the law of armed conflict⁶⁹ when its military action fails to discriminate between civilian and military objects, when the benefits derived from its action are not proportional to the harms inflicted, or when the destruction of certain property is not necessary for the State to achieve

indicates that States intended to preserve the right to anticipatory self-defense).

⁶⁶ David A. Sadoff, “A Question of Determinacy: the Legal Status of Anticipatory Self-Defense,” 40 *Geo J. Int’l Law* 523, 545 (Winter 2009)(citing *Nicaragua v. U.S.*, *supra* note 43, at 103-104).

⁶⁷ *Compromis* ¶17.

⁶⁸ *Id.*

⁶⁹ Hereinafter “LOAC.”

its goals.⁷⁰ Telesto violated all of these provisions when it destroyed civilian property, caused significant damage with little military benefit, and did so even though it did not face an immediate threat from the objects it destroyed.

A State violates the principle of discrimination when it does not distinguish between military and civilian targets.⁷¹ In the first Gulf War, Iraq violated this principle when it fired SCUD missiles against Saudi and Israeli cities.⁷² By firing against cities, Iraq’s likelihood of harming civilians and civilian property was much greater than the likelihood of harming legitimate military targets. Similarly, in firing on the Ijiraq system, Telesto’s likelihood of damaging civilian property was much greater than the likelihood that it would damage military targets because the Fornjot citizens owned the Ijiraq.⁷³ Furthermore, while the Ijiraq satellites were available for military and non-military use, there is no indication that Fornjot ever used them in a military capacity.⁷⁴

Telesto also violated the proportionality requirement of the LOAC. The proportionality principle mandates that a State weigh the potential damage that the use of force will inflict upon civilians or civilian property against the military benefits that will result from such force.⁷⁵ Telesto violated this principle because,

⁷⁰ Ramey, *supra* note 34 at 35-40.

⁷¹ Michael N. Schmitt, *The Principle of Discrimination in 21st Century Warfare*, 2 *Yale Hum. Rts. & Dev. L.J.* 143, 148 (1999).

⁷² *Id.* at 148 (citing U.S. Department of Defense, Report to Congress on the Conduct of the Persian Gulf War (Title V Report to Congress) (1992), at 621-22, *reprinted in* 31 *I.L.M.* 612 (1992)).

⁷³ *Compromis* ¶11 (noting that Iapetus & Co. owned the Ijiraq system and that Iapetus is a private Fornjotian firm owned by private Fornjotian citizens and the Fornjot government).

⁷⁴ *Compromis* *passim*.

⁷⁵ Ramey, *supra* note 34 at 39-40 (noting that the requirement of proportionality “essentially prohibits the use of military force that creates collateral damage to civilians or property, not otherwise legitimate targets, that is

as explained in Part III(B), *supra*, neither the Rhea nor the Ijiraq systems threatened Telesto at the time of the attack; as such, their destruction offered Telesto little military benefit.

In contrast, the destruction of Rhea and Ijiraq resulted in a significant amount of space debris, which could have devastating consequences for the use and exploration of space. There is no question that space debris is dangerous: on 11 November 2017, microscopic debris forced the 11 November 2017 emergency de-orbit of a Fornjot spacecraft.⁷⁶ Similarly, the 10 February 2009 collision of one Russian and one American satellite generated over 600 pieces of space debris, raising concerns that the Hubble Space Telescope and International Space Station might be damaged by the debris. While that incident involved only two satellites, the attacks in the instant case destroyed 32 Ijiraq satellites and a significant number of Rhea components; it is reasonable to assume that the number of objects destroyed caused a significant increase in debris.⁷⁷ Accordingly, Telesto violated the proportionality principle because the damage caused by its destruction of Ijiraq and Rhea vastly eclipsed the military benefits derived from the action.

Finally, Telesto violated the military necessity requirement of the LOAC because the destruction of Rhea and Ijiraq was not necessary for Telesto to achieve its goal of retribution.⁷⁸ A State may only destroy property if doing so is necessary to achieve its goals.⁷⁹ In the instant case, Telesto did not need to resort to use of force to achieve retribution. Rather, it would

disproportionate to the military value of the objective”).

⁷⁶ Compromis ¶19.

⁷⁷ Similarly, a 2009 Economist article indicated that the 2007 destruction of the Chinese Fengyun-1C in an anti-satellite missile test accounts for one quarter of all space debris. “Flying Blind,” THE ECONOMIST, 21-27 February, 2009.

⁷⁸ Alternately, assuming Telesto’s goal was self-defense, Fornjot’s actions were still proper because destruction of Rhea and Ijiraq did not increase Telesto’s security in any meaningful manner. See §III(B), *supra*.

⁷⁹ Ramey, *supra* note 34 at 35-36.

have been preferable for Telesto to pursue a diplomatic resolution to its grievance.⁸⁰ Pursuing such a resolution would have prevented the unfortunate damage to civilian property and increase in space debris resulting from the attack on the Rhea and Ijiraq, and provided Telesto with an internationally acceptable means of obtaining retribution.

IV. The deployment of the Hyperion and Rhea systems does not offend international law because the satellites operated solely for Fornjot’s defense and neither the OST nor any other international law prohibits non-aggressive military uses of outer space.

A. The deployment of the Rhea and Hyperion was permissible because they are defensive, not aggressive, objects.

Fornjot’s use of space-based anti-satellite and anti-missile systems does not violate the OST. As used in the preamble and Article IV of the Treaty, “peaceful” could mean either “non-militaristic” or “non-aggressive.”⁸¹ Non-aggressive is both the most practical interpretation and the most commonly applied because it is impossible divorce the OST’s goal of benefitting mankind through scientific exploration and experimentation in outer space without permitting States’ military units to explore and experiment in space.⁸²

⁸⁰ See §III(B), *supra*.

⁸¹ *OST*, *supra* note 1, preamble; art. IV. See Christol, *supra* note 2, at 26.

⁸² When the treaty was written, a majority of astronauts were also members of their States’ military services; Article IV of the *OST* is written to accommodate such persons. See *OST*, *supra* note 1, art. IV. See also Glenn H. Reynolds and Robert P. Merges, OUTER SPACE: PROBLEMS OF LAW AND POLICY 71 (Westview Press 1998)(quoting U.S. Ambassador Arthur Goldberg: “Man could not have penetrated outer space and survived in that hostile environment unless he had been able to draw upon the benefits of all research, civilian or military, involving both personnel and equipment.”)

Furthermore, at the time the OST was ratified, the space powers themselves reserved a right to defend themselves against foreign aggression through the military use of space when necessary. As United States Senator Albert Gore, Sr. asserted in 1962, “the test of any space activity must not be whether it is military or non-military, but whether or not it is consistent with the U.N. Charter and other obligations of law.”⁸³ Because the U.N. Charter permits defense military action, it is reasonable to assume that the United States, at least, believed that the right to defensive military action extended into space.

Because “peaceful” means non-aggressive, and because Hyperion and Rhea are non-aggressive defense mechanisms, international law permits their deployment and use. UN Resolution 3314 defines aggression as “the use of armed force by a State against the sovereignty, territorial integrity, or political independence of another State, or in any manner inconsistent with the Charter of the United Nations.”⁸⁴ The resolution also implies that an act is unlikely to be aggressive if it does not occur in the territory of another State.⁸⁵ Hyperion and Rhea were designed to activate only when a threat enters Fornjotian territory. Their use, then, is purely defensive: they cannot offend the “sovereignty, territorial integrity, or political independence of another State,” because they cannot act unless another State has acted aggressively towards them. Similarly, they do not fire outside of Fornjotian territory. A State has the right to the use of armed force within its own domain,⁸⁶ Fornjot cannot act aggressively towards another State simply by protecting its own territory. Accordingly, neither the Hyperion nor the Rhea constitute anything other than a peaceful use of space.

⁸³ Christol, *supra* note 2, at 29-30

⁸⁴ Definition of Aggression, G.A. Res. 3314, Annex, Art. 1, U.N. Doc. A/Res/29/3314 (Dec. 14 1974).

⁸⁵ *Id.* at annex, art. III(a-b). *But see id.* at annex, art. IV (noting that the enumerated acts of aggression in Art. III(a-g) are not exclusive, and that the Security Council may determine other acts not enumerated are acts of aggression.)

⁸⁶ *See* §V(A), *infra*.

B. Because neither the OST nor any other agreement to which Fornjot is a party limits use of ASAT's or ABM's, Fornjot's use of these devices cannot offend international law.

The plain language of the OST Article IV indicates that its authors did not intend to prohibit anti-ballistic missile [ABM's] and anti-satellite systems [ASAT's]. The article's first paragraph only prohibits certain weapons – specifically, nuclear weaponry and other weapons of mass destruction⁸⁷ – indicating that States can permissibly place certain weapons into orbit.⁸⁸ Similarly, Article IV only explicitly extends the peaceful purposes doctrine to “the moon and other celestial bodies,” and not all of outer space.⁸⁹ Even though several COPOUS members expressed concern that the omission of “outer space” from the doctrine implied that outer space may be used for non-peaceful purposes, provided the moon and celestial bodies were protected,⁹⁰ the treaty framers intended to wait for future disarmament conferences to determine the status of ABM's and ASAT's.⁹¹ These future conferences resulted in the Strategic Arms Limitation [SALT] I Anti-ballistic Missile treaty, which limited the number and size of ABM systems a State could maintain.⁹² The fact that the COPOUS delegates specifically avoided language which might reference ABM's or ASAT's, instead preferring to allow discussion on these issues at a later date, indicates that the OST alone does not bar the use and operation of such devices. Neither Fornjot nor Telesto are signatories to the SALT I Treaty or any

⁸⁷ *OST, supra* note 1, art. IV¶1.

⁸⁸ *See* Mark J. Sundahl, *Information Warfare: The Legal Aspects of Using Satellites and Jamming Technologies in Propaganda Battles*, 49 I.I.S.L. Colloquium 354, 359-60 (Oct. 2006).

⁸⁹ *OST, supra* note 1, art. IV¶2.

⁹⁰ *See* Christol, *supra* note 2, at 24.

⁹¹ *Id.*

⁹² Treaty Between the United States of America and the Union of Soviet Socialist Republics on the limitation of anti-ballistic missile systems, art. III, U.S.-U.S.S.R., May 26, 1972, 23 U.S.T. 3435.

subsequent treaties limiting access to ABM's or ASAT's.⁹³

C. Even if the OST does prohibit the use of non-aggressive military equipment, Fornjot's deployment of the Hyperion and Rhea was legitimate anticipatory self-defense.

Fornjot's deployment of Hyperion and Rhea was a justified response to Telesto's placement of nuclear missiles in Daphnis. Article 51 of the U.N. charter grants member States the right to act in self defense when another State attacks them.⁹⁴ This right is not limited to physical attacks: an overwhelming threat to a State's safety can justify a State's use of so-called anticipatory self defense.⁹⁵ As noted at the Nuremburg tribunal, "preventive action in foreign territory is justified only in case of an instant and overwhelming necessity for self-defense..."⁹⁶ Similarly, the Caroline Principles of customary international law recognize that States have an inherent right to anticipatory self-defense, provided that the defensive action is both proportional to the threat posed and necessary to ensure security.⁹⁷ The speed with

which modern weaponry can destroy a State's property renders the right to such anticipatory self-defense necessary: if international law prevented a State from acting before another nation attacked it, weapons of mass destruction could destroy a significant amount of the State's territory, property, and citizens before the State could respond.⁹⁸

Fornjot's decision satisfied Article 51's requirements and those of the Caroline principles. Telesto's placement of nuclear weapons in Daphnis posed an immediate threat to Fornjot. These weapons could inflict significant harm on Fornjotian territory in a short amount of time. Fornjot would be defenseless without some means of preventing the nuclear missiles from reaching its territory. The presence of the Paaliaq system increased the threat: Telesto's ability to precisely target missiles increased the likelihood that Telesto would be able to decimate strategic Fornjot military installations, thus undermining Fornjot's national security. The magnitude of this threat justified Fornjot's defensive actions and its deployment of the Hyperion and Rhea.

V. Fornjot is not liable for the destruction of the Janus because Fornjot has a right to defend itself from threats in its airspace; Fornjot is not liable for the destruction of the Tarvos satellites because it did not destroy them.

A. Fornjot is not liable for the Janus' destruction because the Janus entered Fornjot's airspace without authorization and international law permits States to defend themselves within their airspace.

The Rhea missile intercepted the Janus within Fornjot's airspace. The OST does not define the boundary between airspace and outer

⁹³ It is questionable whether the ABM treaty even has any persuasive authority: when the United States withdrew from the ABM Treaty in 2001, none of the Treaty's other signatories protested the withdrawal, implying that all Treaty members doubted the Treaty's continuing value. See "U.S. Withdraws From ABM Treaty; Global Response Muted," *Arms Control Today*, July 8 2002, available online at http://www.armscontrol.org/act/2002_07-08/abmjul_aug02 (last visited 27 February 2009); Sonja Pace, "US ABM Treaty withdrawal not expected to hurt ties with Russia," *Voice of America*, Dec. 14, 2001, available online at <http://www.fas.org/nuke/control/abmt/news/121401avoa.htm>.

⁹⁴ U.N. Charter art. 51.

⁹⁵ International Military Tribunal (Nuremberg), Judgment and Sentences (Oct. 1, 1946), reprinted in 41 *Am. J. Int'l L.* 172, 205 (1946).

⁹⁶ *Id.*

⁹⁷ Matthew Allen Fitzgerald, *Seizing weapons of mass destruction from foreign-flagged ships on*

the high seas under Article 51 of the UN Charter, 49 *Va. J. Int'l L.* 473, 479-80 (Winter 2009).

⁹⁸ *Id.* at 484.

space. Functionalists argue that the boundary location depends the type of activity being conducted in space, such that aviation law would apply to aeronautical activities and aerospace law would apply to astronautical activities.⁹⁹ However, the increasing amount of crossover between the two types of activities renders this distinction irrelevant and the functionalist approach insufficiently addresses the boundary question.¹⁰⁰ In contrast, spatialist theorists indicate that the boundary location should be determined based on certain properties of the atmosphere.¹⁰¹ This theory is also unsatisfying because much of the scientific evidence supporting such properties is flawed.¹⁰²

Because of the practical difficulties in determining such a boundary, and because there is no universally accepted boundary, Fornjot retained a justifiable reliance interest in assessing the boundary as between 100km and 110km. To maximize the defensive benefits of the Rhea and Hyperion, Fornjot enabled them to intercept incoming threats as early as legally possible. In doing so, Fornjot relied on the fact that the vast majority of States have indicated that they consider the boundary to lie somewhere between 100km and 110km.¹⁰³

International law protects Fornjot's decision to intercept the Janus when the

⁹⁹S. Neil Hosenball and Jefferson S. Hofgard, *Delimitation of Air Space and Outer Space: Is a Boundary Needed Now?*, 57 U. Colo. L. Rev. 885, 887-88 (1986).

¹⁰⁰ For example, certain aircraft can enter low earth orbit, and certain satellites are able to orbit at extremely low altitudes. *See Id* at 887.

¹⁰¹ *Id.* at p. 888-89.

¹⁰² *Id.* at p. 889.

¹⁰³ *See Id.* at p. 891 (asserting that the Soviet Union advocates establishing a 100-110 km boundary); Dean N. Reinhardt, *the Vertical Limit of State Sovereignty*, 72 J. Air L. & Com. 65, 81-89 (Winter 2007)(noting that Australia defines Outer Space to mean 100 km above mean sea level, South Africa and the United Kingdom define Outer space to mean the maximum height at which an aircraft can fly [approx. 100km], and that while the United States Air Force defines Space as 80.4 km above the Earth's surface.)

spacecraft entered Fornjot's territory without prior authorization. Article 1 of the Convention on International Civil Aviation, Chicago, 1944 asserts that "every State has complete and exclusive sovereignty over the airspace above its territory."¹⁰⁴ Article 3 prohibits State or military aircraft from flying over the territory of another State without authorization and exempts State and military forces from protections prohibiting the use of military force against civil aircraft.¹⁰⁵ Accordingly, Fornjot had a right to defend its airspace from invasion by non-authorized, non-civil aircraft.¹⁰⁶ U.N. Charter Article 51, which grants explicit permission for a State to engage in self defense when subjected to an armed attack against its national territory, supports this right: because Fornjot's airspace constitutes part of its territory, it had the right to defend itself when the Janus, whose trajectory resembled that of an intercontinental ballistic missile, entered its airspace.

B. Fornjot is not liable for the destruction of the Tarvos satellites because it not launch the material that destroyed the satellites.

The Liability Convention does not address whether indirect damage is compensable,¹⁰⁷

but even if it does provide for such damages, its plain language indicates that no indirect damages are compensable in the instant case. A

¹⁰⁴ Convention on International Civil Aviation, Chicago, art 1, Dec. 7, 1944, 15 U.N.T.S. 295 [hereinafter *Chicago Convention*].

¹⁰⁵ *Id.* at art. III.

¹⁰⁶ Perhaps best example of the permissible defense of sovereign airspace occurred in the 1960 U2 spy plane incident, in which Soviet forces attacked an American U2 spy plane committing espionage in Soviet territory. *See* Hosenball & Hofgard, *supra* note 99, 886 (noting that "The United States, despite intense domestic opposition, did not attempt to justify (the U2) flight or protest the subsequent trial of the pilot.")

¹⁰⁷ *See* Christol, *supra* note 2 at p. 96 (indicating that the Convention's drafters refused to address the question of indirect damages.)

State may be liable for damage inflicted in outer space under Articles III, IV, and V of the Convention; none of these articles apply to the instant case.

Neither Article III nor Article V apply because debris from the Janus, and not from any Fornjotian object, destroyed the Tarvos satellites. Under Article III, a State is liable when its space object damages an object launched by another State.¹⁰⁸ Article V stipulates that two States which jointly launch a space object are liable for damage caused by that object to a third object.¹⁰⁹ Neither applies to the instant case because the Janus, launched by Telesto, damaged the Tarvos satellites.

It is not the case that Fornjot is liable because it “launched” the destructive debris when the Rhea missile impacted the Janus. The Liability Convention does not define the term “launch,” under the Vienna Convention on the Law of Treaties, when a term is undefined, treaty interpreters may look to the term’s drafting history to assess its meaning.¹¹⁰ The drafters of the Convention only intended to address damage caused by objects launched from Earth.¹¹¹ As such, the Liability Convention does not extend to an object “re-launched” in space.

Article IV does not apply because the Tarvos satellites are owned by Telesto. Article IV stipulates that a State is liable for damage caused when its object damages another State’s object, and causes that object to damage the object of a third State. The instant case involves no damage to a third State: the Tarvos satellites in question were launched by Telesto, so even if Fornjot was at fault in the initial collision, it could not be liable for the second incident. The Tarvos satellites were not launched by Daphnis,

even though Telesto launched Tarvos-9 from Daphnis’ territory. Under the Registration Convention, only one State may have jurisdiction over an object; as such, when two states jointly launch an object, they must decide which State will register it.¹¹² Because Telesto and its citizens owned the Tarvos satellites, Telesto most likely registered the satellites. Moreover, even if Daphnis was injured, Daphnis is not party to the instant case.

VI. Fornjot is not liable for the destruction of the seven Tarvos satellites by the Hyperion because Fornjot’s actions were a legitimate countermeasure to Telesto’s destruction of Fornjot’s satellite systems, and because Fornjot acted in self-defense.

A. Fornjot’s actions were a valid countermeasure when they were proportional to damage inflicted by Telesto and were done with the intent to limit future attacks by Telesto.

A State may take countermeasures against another State when that other State has committed an internationally wrongful act; the measures should be intended to encourage the State against whom they are taken to comply with its international obligations.¹¹³ Such countermeasures are legitimate when they are proportional to the type of international wrong committed against the State.¹¹⁴

In the Gabčíkovo-Nagymaros case, Hungary violated a treaty between itself and the former Czechoslovakia which required Hungary to build a dam on the Hungarian – Czechoslovakian border. In response, Slovakia built a dam in its territory which limited Hungarian water access. The Court held that Slovakia’s actions were not a legitimate response to the Hungarian action because

¹⁰⁸ *Liability Convention*, *supra* note 50, art. III.

¹⁰⁹ *Liability Convention*, *supra* note 50, art. V.

¹¹⁰ *See VCLT*, *supra* note 11.

¹¹¹ *See Christol*, *supra* note 2, 60 (“Since injury or damage might result from the launching, flight and return to earth of various kinds of space vehicles’... a treaty is needed to determine the liability of such objects.” (quoting Report of the Ad Hoc Committee on the Peaceful Uses of Outer Space, ¶63, U. N. Doc. A/4141, (July 14, 1959)).

¹¹² *Registration Convention*, *supra* note 40, art. II,

¹¹³ *Draft Articles on State Responsibility*, *supra* note 14, art. 49; Gabčíkovo-Nagymaros Project, *supra* note 14, ¶84-86.

¹¹⁴ *Draft Articles on State Responsibility*, *supra* note 14, art. 49 commentary, ¶6.

depriving Hungary of water had a significantly greater impact than Hungary's failure to build the dam.¹¹⁵ The instant case differs from Gabčíkovo-Nagymaros because the damage Fornjot inflicted upon Telesto was commensurate to the damage Telesto inflicted upon Fornjot when it destroyed the Rhea and Ijiraq systems. By destroying the Rhea and Ijiraq, Telesto severely hampered Fornjot's ability to defend itself and to access GNSS services. By destroying the seven Tarvos satellites, Fornjot similarly limited Telesto's access to GNSS.¹¹⁶ Fornjot's countermeasure was not just proportional; its impact was in fact less than that of Telesto's harmful act.

Fornjot also acted with proper purpose because its goal was to encourage Telesto to act in accord with its international obligations. Telesto violated its obligations under the U.N. Charter when it destroyed the Rhea and Ijiraq systems.¹¹⁷ By limiting Telesto's access to GNSS services, Fornjot could limit Telesto's ability to further offend the Charter by hampering its ability to conduct additional military activity against Fornjot. As such, Fornjot's actions were a valid countermeasure under the Draft Articles on State Responsibility.

B. Fornjot's destruction of the Tarvos satellites was a legitimate act of self-defense.

A state may act in self-defense when it faces an immediate threat and has no other means of avoiding this threat.¹¹⁸ Fornjot faced precisely such a threat following Telesto's destruction of the Rhea and Ijiraq. Prior to any military engagement, the Paaliaq and Narvi systems had already granted Telesto an immense military advantage over Fornjot. Following the 18 September 2018 Janus incident, Telesto never notified Fornjot that what Fornjot believed to be an ICBM was in fact a legitimate Janus space capsule, but rather immediately retaliated against Fornjot by destroying the Rhea and

Ijiraq. From Fornjot's perspective, then, prior to any conflict, it was at a military disadvantage. On 18 September, it was attacked by what it believed was an ICBM, and the following day its ABM protection system was decimated. Accordingly, Fornjot reasonably believed it faced a severe and immense threat from a State which had demonstrated a willingness to attack and destroy Fornjotian property. By destroying the Tarvos satellites, Fornjot limited the ability of Telesto's military forces to inflict further harm on such property. Accordingly, Fornjot's destruction of the Tarvos was a legitimate act of self-defense.

SUBMISSIONS TO THE COURT

For the foregoing reasons, the Government of Fornjot, Applicant respectfully requests the Court to adjudge and declare that:

1. Telesto contravened international law by refusing to promptly return to Fornjot the *Berglemir*, its cargo and crew.
2. Telesto contravened international law by the military use of satellite systems by Telesto and Daphnis pursuant to the Skoll convention.
3. Telesto is liable for the destruction of the Rhea and Ijiraq satellite systems.
4. Fornjot did not contravene international law by deploying the Hyperion and Rhea satellite systems in low Earth orbit.
5. Fornjot is not liable for the destruction of the Janus or the Tarvos-9 or Tarvos-24 satellites or for the deaths of the individuals onboard the Janus.
6. Fornjot is not liable for the destruction of the seven Tarvos satellites by the Hyperion.

¹¹⁵ Gabčíkovo-Nagymaros Project, *supra* note 14, 85.

¹¹⁶ Telesto retained access to 27 of the 36 Tarvos satellites. Compromis ¶20, ¶23.

¹¹⁷ See §III, *supra*.

¹¹⁸ See *Nicaragua v. U.S.*, *supra* note 43.

MEMORIAL FOR THE RESPONDENT THE REPUBLIC OF TELESTO

National Law School of India University,
Bangalore, India (Ms. Raesa Vakil, Mr.
Abhimanyu George Jain and Mr. Shwetank
Ginodia; Coach: Dr. Sairam Bhat).

ARGUMENT

I. Telesto did not contravene international law by the military use of satellite systems by Telesto and later by Daphnis pursuant to the Skoll Convention.

The military use of space is legal, and the only restriction is the requirement of compliance with the UN Charter. [A] Daphnis made legal military use of space for self defense, in conformity with the UN Charter. [B] Telesto made legal military use of space for collective self defense. [C]

A. Military Use of Space is Legal in Conformity with the U.N. Charter.

Art. IV of the O.S.T. permits the military use of space (1) and the only restriction on military use of space is the requirement of compliance with the U.N. Charter (2).

1. Art. IV of the OST permits the Military Use of Space.

The text of Art. IV of the OST clearly indicates the legality of military use of space. Such legality is also supported by the *travaux preparatoires* of the OST, as well as subsequent state practice. The use of preparatory works and subsequent state practice in treaty interpretation is recognized as customary rule of international law,¹¹⁹ and is recommended by eminent publicists,¹²⁰ and by the ICJ.¹²¹

¹¹⁹ Maritime Delimitation and Territorial Questions (Qat. v. Bah.), 2001 I.C.J. 18 (16 Mar. 2001); SIR IAN SINCLAIR, THE VIENNA CONVENTION ON THE LAW OF TREATIES 153 (Manchester University Press, 1982).

¹²⁰ Hugh Thirlway, The Law and Procedure of the International Court of Justice, 1960-89, Part

The *travaux preparatoires* of the O.S.T. clearly indicate the framers' intention to legalize the military use of space. Space was already being used for military purposes at the time of negotiation of the OST¹²² and the possibility of complete demilitarization of outer space was discussed,¹²³ but rejected, as both the USA and USSR refused to accept any restriction on the military use of space.¹²⁴ The failure of the O.S.T. to wholly demilitarize space was also recognized by the U.N.S.G. in his speech welcoming the adoption of the OST.¹²⁵

Subsequent state practice also reinforces the legality of military use of space. Many states use remote sensing, communications and global positioning satellites for military purposes such as reconnaissance, military communications, etc.¹²⁶ This legality has received explicit

III BRIT. Y.B. INT'L L. 1, 25 (1991); Sinclair, supra. note 1, 117.

¹²¹ Temple of Preah Vihear (Cambodia v. Thailand), 1961 I.C.J. 27, 32 (July 28); Border and Transborder Armed Actions (Nig. v. Hond.) 1988 I.C.J. 84, 84-5 (Dec. 28).

¹²² Statement of Soviet Delegate, 6 U.N. Doc. A/AC.105/C.2/SR.66 (1966); Paul G. Dembling, *Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies* in MANUAL OF SPACE LAW (N. Jasentuliyana and R.S.K. Lee eds., Oceana Publications, 1979) 4; Statement of Soviet Delegate, 6 U.N. Doc. A/AC.105/C.2/SR.66 (1966).

¹²³ See the statements of the Indian, Austrian, Japanese and Brazilian delegates, U.N. Doc. A/AC.105/C.2/SR.66, SR.71 (1966).

¹²⁴ See statements of the US and USSR Delegates, 6, U.N. Doc. A/AC.105/C.2/SR.66 (1966).

¹²⁵ Statement of UN Secretary General, U.N. Doc. A/PV.1499 (19 December 1966).

¹²⁶ Space Security Index, 2008, 123-36 <http://www.spacesecurity.org/SSI2008.pdf>; The Nigerian Space Agency is developing imagery satellites for military purposes; Canada has launched Radarsat-2 and is developing Polar Epsilon – both providing high tech remote sensing capabilities; China launched the Beidou-4 and -5 satellites for military navigation in

recognition in the annual PAROS resolution passed by the UNGA,¹²⁷ Satellites have been used for military purposes in the UNSC-sanctioned intervention in Kuwait,¹²⁸ in 1991, and during the NATO intervention in Kosovo in 1999.¹²⁹

Thus, both the *travaux préparatoires* of the treaty, as well as subsequent state practice in its implementation, indicate the legality of the military use of space under Art. IV of the OST.

Contextual arguments in favor of complete demilitarization fall before the weight of state practice supporting military use. It is possible to argue that the requirement of use for 'peaceful purposes' be extended to the use of space. But 'peaceful purposes' as defined by eminent publicists implies 'non-aggressive military use' of space.¹³⁰ In other words, military use of space can only be made in compliance with the UN Charter. As will be noted below, this is a recognized limitation on the legality of military use of space.

2. The Only Restriction on the Military Use of Space is the Requirement of Compliance with the UN Charter.

The military use of space is allowed under Art. IV of the OST. But under Art. III of the OST, all space activities must be in

2007; Russia launched the Kosmos-2428 satellite for military signals intelligence in 2007.

¹²⁷ See, for instance, Resolution for Prevention of an Arms Race in Outer Space, U.N. Doc. A/C.1/60/L.27 (1995)

¹²⁸ S.C. Res. 688 (1991), U.N. Doc.

¹²⁹ L. Haeck, 'Legality of Military Use of Space by Canada' 35 PROC. COLL. ON L. OUTER SPACE 360, 361-2 (1992); W D von Noorden, 'INMARSAT Use by Armed Forces: A Question of Treaty Interpretation' (1995) 23 J. SPACE L. 1, 2. .

¹³⁰ R. J. Lee and Michel Bourbonniere, *The Jus Ad Bellum in Outer Space: The Interrelation between art 103 of the UNC and art IV of the OST* 45 PROC. COLL. ON L. OUTER SPACE 139 (2002) 139; Gyula Gal, 'Military Space Activity in the Light of General International Law', 45th PROC. COLL. ON L. OUTER SPACE 162 (2002).

conformity with the UN Charter. Eminent publicists, reading both provisions together, have held that this implies that space can be used for military purposes only in conformity with the UN Charter.¹³¹

On this basis it is urged that military use of space is allowed, so long as it is in conformity with the UN Charter.

B. Daphnis made Legal Military Use of Space for Self-Defense, in Conformity with the UN Charter.

Daphnis made military use of space to defend itself from the Fornjotian naval attack.¹³² Self defense is the necessary and proportionate use of force to defend oneself from an armed attack.¹³³ It has three necessary components – the presence of an armed attack, necessary use of force and proportionate use of force.¹³⁴

Daphnis was responding to a Fornjotian armed attack [1], that is was necessary for it to use force to defend itself [2], and that its use of force was proportionate [3].

1. Daphnis was responding to a Fornjotian Armed Attack.

The Fornjotian fleet set out to attack the Daphnisian navy. This must be construed as the

¹³¹ L. Haeck, *supra*. note 11 ,360; Ivan A. Vlastic, *The Legal Aspects of Peaceful and Non-Peaceful Uses of Outer Space*, in PEACEFUL AND NON-PEACEFUL USES OF SPACE: PROBLEMS OF DEFINITION FOR THE PREVENTION OF AN ARMS RACE 45 (ed. B. Jasani, 1991).

¹³² *Compromis*, Para 27, Lines 2-3.

¹³³ Rosalyn Higgins, *The Legal Limits to the Use of Force by Sovereign States – United Nations Practice*, 37 BRIT. Y.B. INT'L L 269, 297 (1961); C.H.M. Waldock, 'The Control of the Use of Force by States in International Law', 81 RECUEIL DES COURS 455-517 (1952-II), 463.

¹³⁴ Rosalyn Higgins, 'International Law and the Avoidance, Containment and Resolution of Disputes – General Course on Public International Law', 230 RECUEIL DES COURS 9-342, 296 and 310 (1991-V); CHRISTINE GRAY, *INTERNATIONAL LAW AND THE USE OF FORCE*, 128, 148 [3rd Edn., Oxford University Press, 2008].

beginning of the armed attack, creating a valid right of self-defense.

Secondly, even if the armed attack had not yet actually begun, Daphnis was exercising a valid right of interceptive self defense. The right to self defense against an imminent attack has been recognised by eminent publicists¹³⁵ and states, both in opinion¹³⁶ and actual practice.¹³⁷ Daphnis has exercised the right of self defense against an imminent and objectively established armed attack.

On the basis of past hostility and frequent military clashes between the states,¹³⁸ and in light of the 'pin-prick doctrine' where under the legality of instances of use of force is considered in light of relations between the concerned states.¹³⁹, it is submitted that the

¹³⁵ Rosalyn Higgins, *supra*. note 16, 310; IAN BROWNLIE, *INTERNATIONAL LAW AND THE USE OF FORCE BY STATES* (Oxford University Press, 1963) 368.

¹³⁶ Speech by Australian Minister for Defense, <http://www.minister.defence.gov.au/HillSpeech/pl.cfm?CurrentId=2121>; The Japanese 'Law Concerning Measures to Ensure National Independence and Security in a Situation of Armed Attack' of 2003 addresses situations of imminent armed attack; French Bill of Law – 2003-2008 Military Program, French Ministry of Defense, <http://www.ambafrance-us.org/atoz/mindefa.pdf>;

¹³⁷ *USS Vincennes incident*, U.N.Y.B. 199 (1988); *Israeli pre-emptive strike on Iranian nuclear reactor in 1981*: 1 U.N.Y.B. 275 (1981); *Iraqi invasion of Iran in 1980*: 1 U.N.Y.B 312 (1980).; Gray, *supra*. note 16, 160-5.

¹³⁸ *Compromis*, Para 3, Line 6 and Para 16, Line 2.

¹³⁹ *Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.)*, 1986 I.C.J. 14, 99 (June 27) [hereinafter, *Nicaragua case*] *Armed Activities on the Territory of Congo (DRC/Ugan) 2005*, I.C.J. para. 148 (Dec. 19,) [hereinafter *Armed Activities in Congo case*]; Robert Ago, *Addendum to Eighth Report on State Responsibility*, II (1) Y.B.INT'L L.COMM. 13, 69-70 (1980); ROSALYN HIGGINS, *THE DEVELOPMENT OF INTERNATIONAL LAW THROUGH THE POLITICAL ORGANS OF THE*

determination of this armed attack was objectively established.

Thus, Daphnis was clearly responding to an armed attack. Even if the armed attack had not actually commenced, it was objectively imminent, and Daphnis had a valid right to respond with defensive force.

2. It was Necessary for Daphnis to use Force to defend Itself.

Defensive uses of force are necessary when it is the last possible alternative to protect oneself from attack.¹⁴⁰ In the present instance, the Fornjotian attack was objectively imminent, leaving no time to contemplate any other response. Delaying any further would have caused Daphnis to sustain damage.

It was thus necessary for Daphnis to use force to defend itself.

Daphnis' obligations to peaceably resolve disputes under Art. 2(3) of the UN Charter cannot be cited as proof of the lack of necessity of Daphnis' actions. Art. 2(3) does not impose an obligation to achieve any particular result.¹⁴¹ It merely requires states to make all possible efforts to peaceably resolve disputes. In the context of relations between Fornjot and Daphnis, all possible efforts would already have been made. Attempting to establish communication with Fornjot to broker a peaceful resolution would have been a waste of valuable time needed by Daphnis to secure its defenses.

UNITED NATIONS 201 (Oxford University Press, 1963).

¹⁴⁰ *Nicaragua case*, *supra* note. 21 *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 I.C.J. 161, 263 (July 8) [hereinafter, *Nuclear Weapons Advisory case*]; YORAM DINSTEIN, *WAR, AGGRESSION AND SELF DEFENSE*, 184. (Cambridge University Press, 1988) (2001).

¹⁴¹ THE CHARTER OF THE UNITED NATIONS, A COMMENTARY 101-2 (ed. Bruno Simma, Oxford University Press, 1995), GOODRICH, HAMBRO AND SIMONS, *CHARTER OF THE UNITED NATIONS, COMMENTARY AND DOCUMENTS* 41-3 (Columbia Press, 1969).

3. The Daphnisian Use of Force was Proportionate.

The proportionality of defensive force is defined in terms of the nature, size and duration of the defensive use of force.¹⁴² In other words, the force used must not exceed the amount of force required to counter the threat at hand.¹⁴³

The Daphnisian use of force was proportionate. Daphnis was forewarned of the attack and had the precise locations of each of the Fornjotian ships for missile targeting purposes.¹⁴⁴ Daphnis could have destroyed the Fornjotian fleet. However, Daphnis restrained itself and stopped at ensuring that the attack was 'unsuccessful'.¹⁴⁵

Therefore, Daphnis was acting legally in self-defense.

C. Telesto made Legal Military Use of Space, in Conformity with the UN Charter.

In a situation where one state responds to a request from assistance from a second state with respect to a threat posed by a third state, the first state's use of force can be justified as collective self defense.¹⁴⁶

The requirements for exercise of the right of collective self defense have been discussed by the ICJ in the Nicaragua case.¹⁴⁷ The attacked state should declare its status as such and should explicitly request assistance. Both of these requirements have been met in this case.

¹⁴² Iranian Oil Platforms (Iran v. U.S.) 2003 I.C.J. 161, 330 (Nov. 6, 2003.) [hereinafter, Iranian Oil Platforms case]; Armed Activities in Congo case, *supra*. note 21, para.148; Dinstein, *supra*. note 22 184.

¹⁴³ Gray, *supra*. note 16, 150.

¹⁴⁴ *Compromis*, Para 16, Line 4-6.

¹⁴⁵ *Compromis*, Para 16, Line 4.

¹⁴⁶ Art. 51, UN Charter; *American intervention in Vietnam was justified as collective self defense*: US State Dept. Memo. (4 March 1966); Josef L Kunz, *Individual and Collective Self-Defense in Article 51 of the Charter of the United Nations* 872, 875 41(4) AM. J. INT'L L. (1947).

¹⁴⁷ Nicaragua case, *supra* note. 21, 22-3; Iranian Oil Platforms case, *supra*.note 24, para 51.

In the first place, access to the specific remote-sensed data required would have had to involve a Daphnisian request for assistance. Secondly, only a request for assistance from Daphnis would have made possible the 'active assistance' provided by 'Telestoese military aircraft, vessels and personnel'.¹⁴⁸ This would not have been possible otherwise, given the short time period that would have elapsed between realization of the imminence of the attack and the response to it. Thirdly, the good intentions of Telesto in merely assisting Daphnis are made explicit by their conduct subsequent to the repulsion of the Fornjotian attack. Telesto did not seek to abuse Daphnisian sovereignty. All Telestoese actions were within the terms of the Skoll Convention and intended to protect Daphnis.

In any case, the strictness of these requirements has been criticized in the Nicaragua case judgments itself.¹⁴⁹ The purpose of these requirements is to guard against the possibility of abuse.¹⁵⁰ Construing them too strictly, however, may be impractical.¹⁵¹ The exercise of the right should be allowed, therefore, so long as it is not being abused.

Thus, Telesto has acted validly in collective self defense.

II. Fornjot contravened international law by deploying the Hyperion and Rhea satellite systems in low earth orbit.

The military use of space is legal, but the deployment of weapons in space is not. This contravenes the OST and the Rescue Agreement. Fornjot has violated Art. IV of the OST. [A] Fornjot has violated Art. IX of the OST. [B] Fornjot has violated the Rescue Agreement [C].

¹⁴⁸ *Compromis*, Para 16, Lines 6-7.

¹⁴⁹ Dissenting opinion of Judge Jennings in Nicaragua case, *supra* note. 21, 545.

¹⁵⁰ *Id.*

¹⁵¹ Jochen A. Frowein, 'Reactions by not Directly Affected States to Breaches of Public International Law', 248 RECUEIL DES COURS 345, 367-8 (1994-IV).

A. Fornjot has violated Art. IV of the OST.

Art. IV of the OST clearly allows the military use of space, but this cannot be extended to the deployment of weapons in space. This nuance in the import of the provision becomes apparent on interpretation of Art. IV contextually and teleologically, as required under the VCLT. The customary nature of such interpretation has already been discussed.

One of the main objectives behind the negotiation of the OST was to facilitate international cooperation in the peaceful use and exploration of space.¹⁵² The context points to 'common interest',¹⁵³ 'common benefit',¹⁵⁴ and the requirement of consideration of the interests of other space-faring states.¹⁵⁵

A contextual and teleological interpretation of Art. IV thus necessarily requires incorporation of the consideration of common interest as an extra restriction on the legal military uses of space. The deployment of weapons in space does not meet this requirement.

The deployment of weapons in space creates the grave possibility of accidental or intentional destruction of space objects. This has happened in the case of the *Janus*. The destruction of space objects in the LEO would create huge amounts of space debris, leading to a 'cascade effect' in the LEO.¹⁵⁶ Given that the

¹⁵² Paul G. Dembling, *Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Bodies* in MANUAL OF SPACE LAW 3-5 (Jasentuliyana and Lee eds., Oceana Publications, 1979); Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962 (XVIII) ¶ 2-3 U.N. Doc. A/C.1/L.331 and Corr. I (1963).

¹⁵³ Treaty on the Principles Governing the Activities of States in Outer Space, including the Moon and other Celestial Bodies, Arts. I and III, 27 Jan. 1967 610 U.N.T.S. 205 [hereinafter O.S.T.]. Second Preamble.

¹⁵⁴ O.S.T., *supra*. note 35, Art. I.

¹⁵⁵ O.S.T., *supra*. note 35, Art. IX.

¹⁵⁶ DAVID WRIGHT, LAURA GREGO, & LISBETH GRONLUND, *THE PHYSICS OF SPACE SECURITY*:

LEO is the most heavily populated portion of outer space,¹⁵⁷ the net result would be that the LEO would be rendered unusable.¹⁵⁸

The military use of space does not, however, violate the common interest requirement in this manner. The problem of debris referred to above does not arise in the case of military use of satellites. Moreover, many military satellites are dual-use satellites, capable of being used for military and civilian purposes.¹⁵⁹ Even those satellites which are not put to dual-use are capable of dual use and yield great benefits in the form of scientific advances.¹⁶⁰

A REFERENCE MANUAL 20(American Academy of Arts and Sciences, 2005), http://www.amacad.org/publications/Physics_of_Space_Security.pdf; HOWARD A. BAKER, *SPACE DEBRIS: LEGAL AND POLICY IMPLICATIONS* 26 (Martinus Nijhoff Publishers, 1989).

¹⁵⁷ *Technical Report on Space Debris*, Text of the report adopted by the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, 1999, U.N. Doc. A/AC.105/720 (1999); United States, Office of Science and Technology Policy, *Interagency Report on Orbital Debris 4* (Washington, 1995).

¹⁵⁸ J.C. Liou and N.L. Johnson, *Risks in Space from Orbiting Debris* 311 (5759) SCIENCE 340-341 (20 Jan. 2006). (Studies by NASA indicate that probably, about 60% of all catastrophic collisions occurring in the LEO will result in tripling of the amount of debris, leading to a factor of 10 increase in collisional probabilities.

¹⁵⁹ Space Security Index, 2008, available at <http://www.spacesecurity.org/SSI2008.pdf>, 123-9; examples of dual-use satellites are: the French Syracuse-III communications system; the Spanish XTAR-EUR communications system; the EU-ESA Galileo navigation system; China maintains no distinction between its civilian and military programs.

¹⁶⁰ Richard A. Morgan, *Military Use of Commercial Communication Satellites: A New Look at the Outer Space Treaty and Peaceful Purposes*, 60 J. AIR L. & COM. 237 (1994); Ricky J Lee and Michel Bourbonniere, *The Legality of Deployment of Conventional*

Thus, the military use of space is permissible under Art. IV of the OST, but the deployment of weapons is not. This is affirmed by subsequent state practice. While the military use of space has expanded,¹⁶¹ there has emerged a customary norm against the deployment of weapons in space.

In the first place, between 1959 and 2002, the UNGA has passed 40 resolutions urging international cooperation in the peaceful uses of outer space.¹⁶² This has contributed to the creation of a customary norm of international law as these resolutions contain specific normative content on cooperation and peaceful use, indicative both of state practice and *opinio juris*.¹⁶³

Secondly, the UNGA has been passing an annual resolution on PAROS since 1982.¹⁶⁴ USA has consistently abstained or opposed these resolutions,¹⁶⁵ but in 2009 the new American government has indicated its commitment to

Weapons in Earth Orbit: Balancing Space Law and the Law of Armed Conflict 18 EUR. J. INT'L L. 873 (2007).

¹⁶¹ *Infra*.

¹⁶² For a complete list and full texts, refer UNOOSA, Index of Online General Assembly Resolutions Relating to Outer Space, <http://www.oosa.unvienna.org/oosa/en/SpaceLaw/gares/index.html>

¹⁶³ Gerardine Meishan Goh, *Tintalle – Kindling International Security with Space Law* (2003) 46 *Colloquium* 261; Gerardine Meishan Goh, *Keeping the peace in outer space: a legal framework for the prohibition of the use of force*, 20 (4) SPACE POL. 259-278 (Nov. 2004).

¹⁶⁴ See Sarah Estabrooks, *Update on Prevention of an Arms Race in Outer Space* 27 (3) THE PLOUGHSHARES MONITOR (Autumn 2006) (for a review of PAROS Resolutions passed by the U.N.G.A.);

<http://www.ploughshares.ca/libraries/monitor/mons06c.pdf> ; See also, *Outer Space and the United Nations* Factsheet, Reaching Critical Will

<http://www.reachingcriticalwill.org/legal/paros/wgroup/PAROS-UN-factsheet.pdf>

¹⁶⁵ *Ibid*.

PAROS.¹⁶⁶ With the withdrawal of American opposition there is now almost universal consent on the need for disarmament in space. This consent is further reflected in the creation of an *ad-hoc* Committee on the Prevention of an Arms Race in Outer Space in the Conference on Disarmament.¹⁶⁷

This demonstrates the evolution of a customary norm against the legality of deployment of weapons in space. Therefore, the deployment of the *Hyperion* and *Rhea* systems is violative of Art. IV.

B. Fornjot has violated Art. IX of the OST.

Art. IX requires states to ‘undertake appropriate international consultations’ before engaging in space activities that ‘would cause potentially harmful interference with the [space] activities of other State Parties’.

Firstly, the deployment of the *Hyperion* and *Rhea* systems by Fornjot would cause great potential damage to the space activities of Telesto and other nations. This has been discussed. Secondly, Fornjot would have been aware of the possibility of such damage. The issue of space debris has frequently been considered by the UNCOPUOS.¹⁶⁸ As a member of the UNCOPUOS, Fornjot would have been

¹⁶⁶ White House Wants Space Weapons Ban, *Aviation Week* (Jan 27 2009) <http://www.aviationweek.com/aw/generic/story.jsp?id=news/Spacewea012709.xml&headline=White%20House%20Wants%20Space%20Weapons%20Ban&channel=space>

¹⁶⁷ G.A. Res. 45/55 (1991) Preamble 10, U.N. Doc. A/RES/45/55 (welcoming the establishment of the ad hoc Committee in the 1990 session of the Conference on Disarmament).

¹⁶⁸ Technical Report on Space Debris, *supra* note 39; Secretariat, Scientific and Technical Subcommittee, UNCOPUOS, *National research on space debris, safety of space objects with nuclear power sources on board and problems of their collisions with space debris* U.N. Doc. A/AC.105/751 (8 May 2007); G.A. Res. 63/90 (2008) U.N. Doc. A/RES/63/90 (“considering that space debris is an issue of concern to all nations”).

aware of these discussions and the dangers of space debris. Thirdly, Fornjot did not engage in any international consultations. The protests made by Telesto, Daphnis and other nations cannot constitute protests.¹⁶⁹ The purpose of providing for consultations is to ensure protection of the interests of all states.¹⁷⁰ This requires a cooperative attitude and willingness to compromise. This was clearly absent from Fornjot's conduct.

Thus, Fornjot was required by Art. IX of the OST to engage in international consultations before deploying the *Hyperion* and *Rhea* systems. It clearly did not do so. On this basis it is urged that Fornjot has violated Art. IX of the OST.

C. Fornjot has violated the Rescue Agreement.

The Rescue Agreement imposes an obligation on states to rescue distressed space personnel.¹⁷¹ The basis of this obligation is not only legal, but also basic humanitarian values.¹⁷² It is possible that a state object is forced to return to Earth in distress with a damaged communications system. Such a space object might return to Fornjotian territory. In such a case, the *Hyperion* and *Rhea*, being automated weapon systems,¹⁷³ would destroy the space object and the space personnel on board. The deployment of the *Hyperion* and *Rhea* systems thus precludes any possibility of Fornjot being able to fulfill its obligations under the Rescue Agreement. This constitutes a violation of the Rescue Agreement. Fornjot is not honoring its obligations under the Rescue Agreement in good

¹⁶⁹ *Compromis*, Para 18.

¹⁷⁰ Paul G. Dembling, *Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Bodies* in MANUAL OF SPACE LAW 20-22 (Jasentuliyana and Lee eds., Oceana Publications, 1979).

¹⁷¹ *Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space*, Art. 2 opened for signature 22 April 1968, 672 U.N.T.S. 119.

¹⁷² *Ibid.*

¹⁷³ *Compromis*, Para. 17, Line 9

faith, as required by the *pacta sunt servanda* principle.¹⁷⁴

Therefore, the deployment of the *Hyperion* and *Rhea* satellite systems is illegal. This deployment also constitutes a violation of Art. 2(4) of the UN Charter as it constitutes an act of aggression and a threat of use of force.¹⁷⁵ The deployment also violates the customary LOAC principles of environmental protection¹⁷⁶ (destroying outer space environment), and distinction¹⁷⁷ (difference between civilian and military objectives).¹⁷⁸

III. Telesto did not contravene international law by refusing to return to Fornjot the Bergelmir, its cargo and its crew.

Though the text of the provisions of the Rescue Agreement indicates an absolute obligation, the process of interpretation should not be restricted to the text [A]. The text, in the light of its context and the objects and purposes of the treaty, indicates a conditional obligation [B]. Finally, the *travaux préparatoires* and circumstances of conclusion of the treaty support a conditional obligation [C]. Therefore, the obligation under the Rescue Agreement is not absolute.

A. The Text of Arts IV and V Indicates an Absolute Obligation, but the

¹⁷⁴ Vienna Convention on the Law of Treaties, Art. 26 opened for signature May 23, 1969, 1155 U.N.T.S. 331, [hereinafter VCLT].

¹⁷⁵ Nuclear Weapons Advisory Opinion, *supra*. note 21, 27

¹⁷⁶ See M.N. Schmitt, *Green War: An Assessment of the Environmental Law of International Armed Conflict* 22 YALE J. INT'L L. 52 (1997).

¹⁷⁷ Protocol Additional to the Geneva Conventions of Aug. 12, 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I), Dec. 12, 1977, art. 48 and 52 1125 U.N.T.S. 3. (entered into force Dec. 7, 1978) [hereinafter Protocol I].

¹⁷⁸ Nuclear Weapons Advisory Opinion, *supra*. note 21, 336.

Interpretative Process Should Not Be Stopped Here.

Reliance on textual interpretation alone is contrary to international law and the jurisprudence of the ICJ. Firstly, the VCLT requires such interpretation.¹⁷⁹ Secondly, the ICJ has reiterated the necessity of a contextual and teleological understanding of treaty provisions.¹⁸⁰ Finally, it is observable that the court is less willing to be convinced of a particular interpretation on the basis of the text of the provision alone and regularly takes recourse to multiple interpretive rules.¹⁸¹

B. The Text, in the Light of the Context and the Objects and Purposes of the Treaty, Indicates a Conditional Obligation.

The preamble of the Rescue Agreement refers to the OST,¹⁸² and to the goal of promoting international cooperation in the peaceful use and exploration of space.¹⁸³ The objects and purposes of the treaty include facilitating the exploration of space in the common interest of mankind.¹⁸⁴ This indicates a conditional obligation based on compliance with the *CJS*.

The principle of effectiveness, otherwise known as the doctrine of *ut res magis valeat*

quam pereat, also supports this conclusion.¹⁸⁵ Stated simply, this rule mandates that a treaty not be interpreted in a manner that renders it incapable, in terms of unusual and unlikely,¹⁸⁶ of achieving its objective.¹⁸⁷ Interpreting arts IV and V of the Rescue Agreement to impose an absolute obligation will produce exactly such a result. This will lead to a large number of states withdrawing from the Agreement. These states had made this intention clear during the negotiations itself.¹⁸⁸ This will effectively negate the objective of the Rescue Agreement.

C. Recourse to the Travaux Préparatoires and Circumstances of Conclusion also Indicate a Conditional Obligation

Recourse to the preparatory materials of a treaty is allowed under the VCLT,¹⁸⁹ and is

¹⁷⁹ V.C.L.T., *supra* note 56, art. 31(1).

¹⁸⁰ Temple of Preah Vihear (Cambodia v. Thail.), 1961 I.C.J. 27, 32 (July 28); Border and Transborder Armed Actions (Nig. v. Hond.) 1988 I.C.J. 84, 84-5 (Dec. 28).

¹⁸¹ Maritime Safety Committee (IMCO), Advisory Opinion, 1960 I.C.J. 150, 160-5 (June 8); Right of Passage over Indian Territory (India v. Port.) 1960 I.C.J. 6, 38 (Apr. 12); Thirlway, *supra* note 2, 25.

¹⁸² Rescue Agreement, *supra* note 53, Third Preamble.

¹⁸³ Rescue Agreement, *supra* note 53 Third Preamble.

¹⁸⁴ Rescue Agreement, *supra* note 53, Preamble; Roy S.K. Lee, *Assistance to and Return of Astronauts and Space Objects*, in MANUAL ON SPACE LAW 53, 58 (Nandasiri Jasentuliyana & Roy S.K. Lee eds., Oceana Publications 1979); GYULA GAL, SPACE LAW 220 (AW Sijthoff 1969).

¹⁸⁵ Reparations for Injuries, Advisory Opinion, 1949 I.C.J. 174, 174 (Apr. 11); Corfu Channel (U.K. & N. Ir. v. Alb.), 1949 I.C.J. 4, 23-6 (Apr. 9); LORD MCNAIR, THE LAW OF TREATIES 383-5 (Clarendon Press 1961).

¹⁸⁶ Application of the Convention of 1902 Governing the Guardianship of Infants (Neth. v Swed.), 1958 I.C.J. 55, 70 (Nov. 28); [hereinafter Guardianship case]; Thirlway, *supra* note 63 45.

¹⁸⁷ Interpretation of Peace Treaties with Bulgaria, Hungary and Romania, Advisory Opinion, 1950 I.C.J. 221, 229 (July 18); Guardianship Case, *supra* note 68,70); Thirlway, *supra* note 63, 62 .

¹⁸⁸ See, for instance, Statement of Austrian Delegate, U.N. Doc A/AC.105/PV.52, 59 (16 Dec. 1967); Statement of French delegate, UN Doc A/AC.105/PV.52, 32 (16 December 1967); Statement of Japanese Delegate, UN Doc A/AC.105/C.2/SR.86, 11 (14 December 1967); Bin Cheng, *The 1968 Astronauts Agreement or How Not To Make A Treaty*, 1969 Y.B. WORLD AFF. 185, 205-6.

¹⁸⁹ V.C.L.T., *supra* note 56, art. 32; Rights of Nationals of the USA in Morocco (France v. U.S.A.), 1952 I.C.J. 176, 195 (Aug. 27); Maritime Safety Committee (IMCO), Advisory Opinion, 1960 I.C.J. 150, 159 (June 8).

preferred by the ICJ.¹⁹⁰ The *travaux* confirm the conditional nature of the obligation of return suggested above.

In the first place, many countries reserved the positions of their governments on the absolute obligation under the Rescue Agreement.¹⁹¹

Secondly, the negotiation process was marked by the predominance of the space powers and the relative exclusion of the non-space powers.¹⁹² Thus, the outcome of the negotiation cannot be considered to be truly representative of all points of view, especially in the light of the general disinterest of the non-space powers.¹⁹³

Thirdly, the final draft of the agreement was rushed through the approval process.¹⁹⁴ Even in the short time available, changes were made at each stage and, after the agreement was approved, there were many complaints that proper consideration of the draft and consultation with national governments had not been possible, and also that the number of changes made in the limited time available indicated scope for further amendment.¹⁹⁵

It may be seen that the preparatory works do not support an absolute obligation. The existence of an absolute obligation can only be derived from the statements made by a few

¹⁹⁰ Temple of Preah Vihear (Cambodia v. Thail.), 1961 I.C.J. 27, 32 (July 28); Border and Transborder Armed Actions (Nig. v. Hond.) 1988 I.C.J. 84, 84-5 (Dec. 28); Thirlway, *supra*. note 62, 33 (1991).

¹⁹¹ Statement of Austrian Delegate, U.N. Doc. A/AC.105/C.2/SR.87, 10, (15 Dec. 1967); Statement of French delegate, U.N. Doc. A/AC.105/C.2/SR.86, 14, (14 Dec. 1967) Statement of Japanese delegate, U.N. Doc. A/AC.105/C.2/SR.86, 11, (14 Dec. 1967); Bin Cheng, *supra*. note 70, 205-6.

¹⁹² Bin Cheng, *United Nations Resolutions on Outer Space: "Instant" International Customary Law?* 5 INDIAN J. INT'L L. 23, 27-8 (1965); Roy S.K. Lee, *supra*. note 66, 53, 57.

¹⁹³ Bin Cheng, *supra*. note 74, 185, 197; Roy S.K. Lee, *supra*. note 66, 53, 55.

¹⁹⁴ *Supra*. note 75.

¹⁹⁵ *Supra*. note 75.

countries. Thus, there is no absolute obligation of return under the Rescue Agreement.

This view is supported not only by the treaty itself, but also by significant academic authority.¹⁹⁶ While some publicists do argue for the existence of an absolute obligation, they acknowledge the practical implausibility of such an onerous obligation. They agree that states will either refuse to actually honour the obligation of return,¹⁹⁷ or will argue that the landing was intentional and hence, there is no obligation to return.¹⁹⁸

IV. Fornjot is liable for the destruction of the Janus, the deaths of the persons on board the Janus and the Tarvos-9 and Tarvos-24 satellites.

The destruction of the *Janus*, the deaths of the persons on board and the destruction to the *Tarvos-9* and *Tarvos-24* satellites is an internationally wrongful act [A] for which Fornjot is responsible and consequently liable under international law [B] and the Liability Convention. [C]

A. The Destruction of the *Janus*, the Consequent Deaths of the Persons on Board and Destruction of the *Tarvos-9* and *Tarvos-24* Satellites is an Internationally Wrongful Act.

Fornjot has committed an internationally wrongful act by acting in violation of the

¹⁹⁶ GYULA GAL, SPACE LAW 225 (AW Sijthoff 1969); Roy S.K. Lee, *supra*. note 66 69-71; Piet-Hein Houben, *A New Chapter of Space Law: The Agreement on the Rescue and Return of Astronauts and Space Objects*, 15 NETH. INT'L L. REV. 121, 128 (1968).

¹⁹⁷ Bin Cheng, *supra*. note 66 192 & 206.

¹⁹⁸ CARL Q. CHRISTOL, THE MODERN INTERNATIONAL LAW OF OUTER SPACE 193-4 (Pergamon Press, 1982); Stephen Gorove, *Interpreting Salient Provisions of the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space*, 11 PROC. COLL. ON L. OUTER SPACE 93, 95 (1968).

obligation not to use force [1] and contravening fundamental principles of international humanitarian law. [2]

1. Fornjot has violated the Obligation to refrain from Use of Force under Art. 2 (4) of the UN Charter, and is not absolved of this Violation by the Exception of Self-Defense.

Art. 2 (4) of the UN Charter requires that States refrain from “the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations”¹⁹⁹. This has been recognised as a rule of customary international law²⁰⁰ as well as a *jus cogens* norm.²⁰¹ The only exception to this norm is the exercise of force in lawful self defense, which must be exercised in response to a threatened or imminent armed attack, in a reasonable and proportionate manner. It is submitted that Fornjot has not exercised force in accordance with the requirements of self defense and accordingly, cannot claim this exception.

Fornjot’s attempt to justify the use of force against Janus on the grounds of mistaken identification as a ballistic missile and therefore an imminent threat²⁰², fails both on fact and law. The argument of ‘mistaken’ self defense, when attempted to be employed in international disputes has met with wide disapprobation and lack of acceptance and is not legally valid.²⁰³ On

¹⁹⁹ U.N. Charter, Art. 2 (4).

²⁰⁰ Nicaragua case, *supra* note. 21, 100-101 (June 27); Randelzhofler, *Article 2, in 2 THE CHARTER OF THE UNITED NATIONS: A COMMENTARY* 112 (2nd ed. 2002).

²⁰¹ Nicaragua case, *supra* note. 21 100 (opinion of Judge Nagendra Singh); affirmed by the German *Bundesverwaltungsgericht*, BverwG 2 WD 12.04, para 4.1.2.6; Oil Platforms (Iran v. U.S.) 2003 I.C.J. 161, 330 (Nov. 6) (Separate Opinion of Judge Simma).

²⁰² *Compromis*, Para 20.

²⁰³ See, for instance, the finding of the Commission in the *Dogger Bank Incident*, Finding of the International Commission of Inquiry Organized Under Article 9 of the Convention for the Pacific Settlement of

facts, it is clear that even in 2005, automated missile systems possessed the capacity to distinguish between aircraft and incoming missiles²⁰⁴, and the failure to make such distinction was acknowledged to be due not to technical incapacity, but a lack of sufficient operator control, extensive automation without verification of threats, and incorrect parameters of identification.²⁰⁵ In essentially exercising force in the absence of an armed attack,

2. Fornjot has violated Essential Principles of International Humanitarian Law in its Exercise of Force.

A use of force that is “proportionate under the law of self defense, must, in order to be lawful, also meet the requirements of the law applicable under armed conflict.”²⁰⁶ Fornjot’s use of force violates not only the *jus ad bellum*, governing resort to force, but also the modern *jus in bello*, which govern “the rules by which international law regulates the actual conduct of

International Disputes, of July 29, 1899, 2 AM. J. INT’L L. 929 (1908); the Waima Incident, Report of the Commission of Enquiry into the Incidents on the Frontier Between Bulgaria and Greece, League of Nations Doc. C.727.M.270 (1925); *the Mazuia Incident*, Dommages Colonies Portugaises (Port. v. Germ.) 2 R. INT’L ARB. AWARDS 1013, 1017-19 (1928).

²⁰⁴ US Government of Accountability Office, *Report to the Chairman, SubCommittee on Investigations and Oversight, Committee on Science, Space and Technology, House of Representatives*

<<http://www.gao.gov/products/IMTEC-92-26>> at 22 July 2009.

²⁰⁵ *Report of the Defense Science Board on Patriot System Performance*, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington DC (January 2005) <http://www.acq.osd.mil/dsb/reports/2005-01-Patriot_Report_Summary.pdf>

²⁰⁶ Nuclear Weapons Advisory Opinion, *supra* note 21, 226 & 245.

hostilities once the use of force has begun”²⁰⁷. Admittedly, the ICJ has emphasized that the basic principle of respect for sovereignty is violated by an unauthorized intrusion into the sovereign airspace of another state.²⁰⁸ However it is submitted that Fornjot cannot claim a violation of its airspace [a] and further, even if it did, Fornjot is still not entitled to respond with force. [b]

a. Fornjot Cannot claim a Violation of its Airspace.

It is undeniable that space, being the “province of all mankind”²⁰⁹ is free for the exploration and use by all states²¹⁰. While several definitions of outer space have been proposed²¹¹, the absence of consensus²¹² among

²⁰⁷ Christopher Greenwood, *The Relationship between ius ad bellum and ius in bello*, 9 (4) REV. INT’L STUDIES 221, 221 (1983).

²⁰⁸ Nicaragua case, *supra* note. 21J. 14, 77 (June 27).

²⁰⁹ Treaty on the Principles Governing the Activities of States in Outer Space, including the Moon and other Celestial Bodies, Arts. I and III, 27 Jan. 1967 610 U.N.T.S. 205 [hereinafter O.S.T.]. Art. I. See also, Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962 (XVII) ¶ 2, U.N. Doc. A/CI/L.331 and Corr.1.

²¹⁰ O.S.T., *supra*.note 91, Art. I; See generally, Manfred Lachs, *The International Law of Outer Space*, 113 RECUEIL DES COURS 47-51 (1964–III); STEPHEN GOROVE, *STUDIES IN SPACE LAW: ITS CHALLENGES AND PROSPECTS*, 49-63 (A.W. Sijthoff-Leyden, 1977).

²¹¹ Report of the Secretariat, Legal Sub-Committee, Committee on the Peaceful Uses of Outer Space, *Historical Summary on the Consideration of the Question on the Definition and Delimitation of Outer Space*, U.N. Doc. A/AC.105/769 (18 Jan. 2002); ROBERT F. A. GOEDHART, *THE NEVER ENDING DISPUTE: DELIMITATION OF AIR SPACE AND OUTER SPACE* (Editions Frontieres, 1996).

²¹² Note by the Secretariat, Legal Sub-Committee, *Analytical summary of the replies to the questionnaire on possible legal issues with regard to aerospace objects: preferences of*

states on a common definition indicates the boundary between airspace and outer space remains *non liquet* in law.²¹³ Accordingly Fornjot cannot claim that Telesto violated its airspace.

b. Even if Fornjot’s Airspace was Violated, it is Still not Justified in using Force.

For the purposes of argumentation if it were to be assumed, that the *Janus* violated Fornjot’s airspace, it is still not entitled to immediately destroy foreign spacecraft. This position in law corresponds to the customary treatment of civilian aircraft in times of war and peace²¹⁴ and is applicable in space by virtue of art. III of the OST.²¹⁵ It is generally agreed attacks on aircraft, particularly non-hostile craft, must be preceded by a warning signal requiring

member States U.N. Doc. A/AC.105/849 (25 Jan. 2005). The lack of consensus on the definition of outer space was affirmed in G.A. Res.

²¹³ See *inter alia* the statements of the U.S., Czech, Ukrainian, German, Belarussian, Nigerian delegates in the U.N.C.O.P.U.O.S., *supra* note 94 The question of delimitation currently remains on the agenda of the UNCOPUOS for future determination, Resolution on International Co-operation for the Peaceful Uses of Outer Space G.A. Res. 63/90 (2008) ¶ 4 (a) (iv), U.N. Doc. A/RES/63/90 (18 Dec.2008).

²¹⁴ International Civil Aviation Organization (ICAO), *Convention on Civil Aviation ("Chicago Convention")*, Art. 3bis 7 December 1944, (1994) 15 U.N.T.S. 295; *Aerial Incident of 3 July 1988 (Islamic Republic of Iran/United States of America)* [1989] ICJ Rep 132; International Civil Aviation Organisation [I.C.A.O.] *Report on the Destruction of Iran Airbus on July 3 1988*, 28 INT’L LEGAL MAT. 896, (1989); Oliver J. Lissitzyn, *The Treatment of Aerial Intruders in Recent Practice and International Law*, 47 AM. J. INT’L L. 559 (1953); David K Linnan, *Iran Air Flight 655 and Beyond: Free Passage, Mistaken Self Defense and State Responsibility* 16 YALE J. INT’L L. 245, 247 (1991).

²¹⁵ O.S.T., *supra*.note 91, Art. III.

them to land peacefully, following which force may be used in self defense if an attack commences.²¹⁶ In the present instance, Fornjot has, without prior warning or ascertainment of threat, shot down a non-military craft in the absence of armed conflict, in clear violation of the fundamental humanitarian principle of distinction²¹⁷.

B. Fornjot is liable under principles of international responsibility.

It is established in custom that a state are responsible for internationally wrongful acts.²¹⁸ An internationally wrongful act has been defined in the ILC Articles on State Responsibility²¹⁹ as a breach of an international obligation, which is attributable to the state. The ILC Articles on State Responsibility have been recognised as representative of rules of customary international law in part.²²⁰ By

²¹⁶ See for instance, The San Remo Manual, Rules 62 and 63; *The Commander's Handbook on the Law of Naval Operations*, NWP-1-14M, FMFM 1-10 COMDTPUB P5800, 7, Naval Warfare Publication, Department of the Navy, Office of the Chief of Naval Operations, para 7.5.1., 7.5.2 and 8.4; See also Corfu Channel (U.K. & N. Ir. v. Alb.), 1949 I.C.J. 4 (Apr. 9).

²¹⁷ United Kingdom, *Manual of Military Law, The Law of War on Land*, pt. 3, art. 284; France, *Reglement de discipline generale dans les force armees*, ch.4, art. 34; Federal Republic of Germany, *Verordnung*, paras 64, 68 (1961). See also Nuclear Weapons Advisory Opinion, *supra*.note 21, 161, 226 & 257.

²¹⁸ I.L.C. Articles on the Responsibility of States for Internationally Wrongful Acts arts. 1 and 2, II Y.B. Int'l. L. Comm'n 55-9 (1975);; See also Factory at Chorzow (F.R.G. v. Pol.), 1927 P.C.I.J. (ser. A) No. 9, at 21 (July 26); Rainbow Warrior (N.Z. v. Fr.), (1990) 82 INT'L L. REP. 499 (Apr. 30); Gabčíkovo-Nagymaros Project (Hung. v Slov.), 1997 I.C.J. 7 (Sep. 25); IAN BROWNLIE, SYSTEM OF THE LAW NATIONS STATE RESPONSIBILITY PART I (Clarendon Press, 1983) (2001).

²¹⁹ I.L.C. Articles on State Responsibility, *supra*. note 100,art. 2.

²²⁰ Commended to governments by G.A. Res.56/83 (12 Dec. 2001) U.N. Doc.

committing the internationally wrongful act of applying force in the absence of a right to self defense, Fornjot incurs responsibility under international law. It is further submitted that by Fornjot's own admission²²¹ such act is attributable to it, and such fact has been independently verified by both State parties.²²²

It is further established in custom, that a State is required to cease to act, and make full reparation for any internationally wrongful act that incurs responsibility.²²³ Where an internationally wrongful act results in damage, state are liable to compensate the afflicted State for this damage,²²⁴ which includes injuries suffered to both, property and life²²⁵ provided that causation can be established.²²⁶

In the present instance, Fornjot committed the internationally wrongful act of using force against the *Janus* and destroying it. Consequently the debris from the *Janus* directly damaged the Tarvos-9 and Tarvos-24 satellites, a fact admitted by Fornjot. It is clear, therefore that Fornjot is liable to compensate Telesto for the destruction of the *Janus*, for the loss of lives of individuals on board the *Janus* and for

A/RES/56/83, deferred for adoption by G.A. Res. 59/35 (2 Dec. 2004), cited in Gabčíkovo-Nagymaros Project (Hung. v Slov.), 1997 I.C.J. 7, para. 47 (Sep. 25); ANTONIO CASSESE, INTERNATIONAL LAW 241 (Oxford University Press, 2001) (2005).

²²¹ *Compromis*, Para 20, Lines 4-6.

²²² *Compromis*, Para. 20, Lines 7-8.

²²³ ILC Articles on State Responsibility, *supra*.note 100Arts. 30 & 31. "It is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form." Factory at Chorzow (F.R.G. v. Pol.), 1927 P.C.I.J. (ser. A) No. 9, at 21 (July 26) (Jurisdiction);; Bernhard Graefrath, *Responsibility and Damages Caused: The Relationship Between Responsibility and Damages*, 185 RECUEIL DES COURS 13, (1984); ²²⁴ *Supra*. note (directly above). See also, Rainbow Warrior (N.Z. v. Fr.), (1990) 82 INT'L L. REP. 499 (Apr. 30).

²²⁵ *Compromis*, Para.20, Lines 9-10.

²²⁶ Factory at Chorzow (F.R.G. v. Pol.), 1927 P.C.I.J. (ser. A) No. 17, at 48 (Sep. 13) (Merits); See also I.L.C. ARSIWA

resultant damage to Tarvos-9 and Tarvos-24 satellites as well. Moreover, even if Fornjot's acts are found to be in conformity with international law and not wrongful, the liability for compensation to damage still remains by virtue of Art. 27 of the I.L.C. ARSIWA.²²⁷

Thus it is submitted that Fornjot is liable to compensate Telesto for damage arising out of its internationally wrongful acts.

C. Fornjot is liable under the Liability Convention.

The Liability Convention²²⁸, to which Telesto and Fornjot are both parties²²⁹ constitutes a regime of liability specifically pertaining to damage arising by and to space objects launched by States. While there is some support for the view that the Liability Convention does not cover instances of intentional damage²³⁰, substantial academic opinion indicates that the LC should be given the widest possible application in all circumstances.²³¹

In the present instance, Fornjot at fault for its actions and is consequently liable under Art. III of the Liability Convention. Art III deals with damage by and to space objects, and space objects have been defined as any object intended to, or travelling into space in its operational stage is a space object.²³² Clearly, both the

²²⁷ I.L.C. ARSIWA, *supra*.note 100 Art. 27.

²²⁸ Convention on International Liability for Damage Caused by Space Objects, *opened for signature* 29 Mar. 1972, 961 U.N.T.S 187 (entry into force 3 Dec. 1968) [hereinafter 'Liability Convention'].

²²⁹ *Compromis*, Para. 27, Line 3.

²³⁰ Graefrath, *Supra*. note 105,185

²³¹ US Senate, *Report from the Committee on Foreign Relations on the Convention on International Liability for Damage Caused by Space Objects*, 92d Congres, 2d Session, Executive Report No. 92-38 (1972), p. 7, expressing the opinion that the Liability Convention applies equally to military space objects; Carl Q. Christol, *International Liability for Damage Caused By Space Objects*, 74(2) AM. J. INT'L L. 355 (1980).

²³² Liability Convention, *supra*.note 100 Art. I; Manfred Lachs, *The International Law of Outer*

*Janus*²³³, and the groundbased missile automatically launched by Fornjot.²³⁴ are space objects. Moreover the destruction took place away from the surface of the earth, bringing fault-based liability into application.²³⁵

Therefore it is submitted that Fornjot is liable to compensate Telesto for the destruction of the *Janus*, the deaths of the persons on board the *Janus* and the damage to the *Tarvos-9* and *Tarvos-24* satellites under the Liability Convention and principles governing the responsibility of states for internationally wrongful acts.

V. Telesto is not liable for the destruction of the *Rhea* and *Ijiraq* satellite systems.

Telesto, in destroying the *Rhea* and *Ijiraq* satellite systems, exercised necessary and proportionate force in self defense.[A] Accordingly Telesto is not liable for the same. [B].

A. Telesto exercised necessary and proportionate force in self defense.

In destroying the *Rhea* and *Ijiraq* satellite systems, Telesto exercised force in accordance with the right to self defense in a manner that was both necessary and proportionate.[1] Such use of force does not amount to an armed reprisal by Telesto.[2]

1. Telesto exercised its right to self defense, in a manner that was both necessary and proportionate.

Telesto exercised its right to self defense in a wholly licit manner. [i] The fact that the destruction of the *Janus* was accidental does not detract from the legality of Telesto's actions. [ii]

Space, 113 RECUEIL DES COURS 7 (1964-III); He Qizhi, *Review of Definitional Issues in Space Law in Light of Development of Space Activities* 34 PROC. COLL.ON L. OUTER SPACE 32 (1991)

²³³ Liability Convention, *supra*.note 100, Art. I; See *Compromis*, Para. 20, Line 1; Statement of Additional Facts, para. 4.

²³⁴ *Compromis*, Para. 20, Line 6.

²³⁵ *Compromis*, Para. 20.

- a. *Telesto's exercise of the right to self defense was licit.*

The right of self defense is exercised against an armed attack either actual or imminent, and must be exercised only when necessary and strictly proportionate to the offence. Fornjot, in its strike against Telesto, destroyed the *Janus*, and killed inter alia, the President of Telesto. This constitutes an armed attack, and sufficient ground for Telesto to invoke the right of self defense.

Telesto's defensive use of force, moreover, was both necessary and proportionate. The destruction of the *Rhea*, clearly a malfunctioning missile system incapable of distinguishing between actual threats and imagined ones, was vital to the security of Telesto. The *Ijiraq*, a global positioning and navigational system, was employed by the Government of Fornjot for civilian and military uses.²³⁶ The military use of a GPNS system is primarily to guide missile systems.²³⁷ The removal of dual use²³⁸ resources as military targets is considered permissible under international law²³⁹ provided that a definite

²³⁶ *Compromis*, Para. 11, Lines 3-4.

²³⁷ GPS is used to guide missiles. For instance, during the 2003 invasion of Iraq, GPS systems were specifically used by U.S.A. for guiding weapons delivery systems to their targets. See Press Release, US Army Space and Missile Defense Command (SMDC), Press Release, US Army Space and Missile Defense Command (SMDC), Oct. 14, 2003, http://cndyorks.gn.apc.org/yspace/articles/lessons_from_iraq_war.htm.

²³⁸ Dual-use, implying both civilian and military applications. Christol *supra*. note 10, 28 See Iole M. De Angelis, *Legal and Political Implications of Offensive Actions From and Against the Space Segment*, 45 PROC. COLL. ON L. OUTER SPACE 197, 198 (2002).

²³⁹ For instance in the Persian Gulf War, major infrastructure targets including electricity supply to civilian and military applications were destroyed. *Department of Defense Report to Congress on the Conduct of the Persian Gulf War: Appendix O on the Role of the Law of War*, 31 INT'L LEGAL MAT. 612, 623 (1992).

military advantage is gained from the destruction of the same.²⁴⁰ The Accordingly, Telesto, in destroying the *Rhea* and the *Ijiraq*, used force in a manner wholly proportionate and necessary.

- b. *The accidental nature of the destruction of the Janus does not detract from the legality of Telesto's actions.*

'Accidental' self defense is not commonly accepted as a valid use of force in international law. In instances where force has been mistakenly deployed against a target that was later revealed to be non-military, or non-threatening, it has been recognised that this amounts to an illegal use of force incurring liability.²⁴¹ The fact that Fornjot mistook the *Janus* for an intercontinental ballistic missile and therefore did not intend to destroy it, does not exculpate it from liability.

2. Such Use of Force does not Amount to an Armed Reprisal by Telesto.

Undoubtedly armed reprisals are forbidden in international law. Some authors have attempted to argue that there exists a limited right to armed reprisals in certain circumstances.²⁴² However the consensus among states is that such reprisals are illegal, and force may only be used in response to another state if it is a legitimate act of self defense.²⁴³ Telesto's

²⁴⁰ hereinafter Protocol I *Supra*. note 59, Art. 52,

²⁴¹ See for instance, the finding of the Commission in the *Dogger Bank Incident*, 2 AM. J. INT'L L. 929 (1908); *Dogger Bank Incident* (Gr. Brit. v. Russ.), Hague Ct. Rep. (Scott) 403-412 (Perm. Ct. Arb. 1916, *the Mazuia Incident*, Dommages Colonies Portugaises (Port. v. Germ.) 2 R.I.A.A. 1013, 1017-19 (1928),

²⁴² See for instance Derek Bowett, *Reprisals Involving Recourse to Armed Force*, 66 AM. J. INT'L L. 31 (1972); O'Brien, *Reprisals, Deterrence and Self Defense in Counterterrorism Operations*, 30 VA. J. INT'L L. 421 (1990).

²⁴³ Nicaragua case, *supra* note. 21. 14, para. 15 (June 27) (Separate Opinion of Judge Simma); *Id.*, at paras. 52-56 (Separate Opinion of Judge

actions do not amount to an armed reprisal. The distinction lies in the punitive nature of an act of reprisal and the protective nature of an act of self defense.²⁴⁴ It is clear therefore that the actions of Telesto constitute valid self defense and not an armed reprisal.

B. Telesto is Not Liable for the Destruction of the *Rhea* and *Ijiraq* Satellite Systems.

Telesto's actions, being in conformity with international law, and consistent with international obligations and the right to self defense, do not give rise to liability in international law. Assuming applicability of the Liability Convention, the requirement of fault has not been met, as Telesto's actions are consistent with its international obligations. On application of principles of state responsibility, Telesto's actions were in valid self defense and hence do not incur liability.

VI. Fornjot is liable for the destruction of the seven *Tarvos* satellites.

Fornjot's destruction of the seven *Tarvos* satellites is an illegal use of force amounting to an armed reprisal [A] and violates essential principles of the law governing armed conflict.[B] Accordingly Fornjot is liable for the same. [C]

A. Fornjot's Destruction of the Seven *Tarvos* Satellites is an Illegal Use of Force Amounting to an Armed Reprisal.

States may not use force except in self defense, and any use of force in response to an act of self defense is an armed reprisal which is illegal in international law. Fornjot's use of force was illegal [1] and amounted to an armed reprisal.[2]

Koojimans); *See also* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 246 (July 8); Brownlie, *supra*. note 17.

²⁴⁴ Nicaragua case, *supra* note. 21, Gray, *supra*. note 16, 150-3.

1. Fornjot's Use of Force was Contrary to International Law.

Telesto destroyed the *Rhea* and *Ijiraq* satellite systems in valid self defense. Once states have exercised self defense, the remedy of self defense no longer remains available to the state exercising force first.²⁴⁵ There is no right of self defense against an act of self defense. Following such act of self defense, the collective security mechanism of the UN comes into operation. Accordingly, Fornjot's use of force is wholly illicit and in violation of the obligation under Art. 2 (4) of the UN Charter.

2. Fornjot's Acts amount to an Armed Reprisal.

International law wholly forbids the use of force in armed reprisals.²⁴⁶ The distinction between an armed reprisal and a licit exercise of the right of self defense has its roots in the punitive character of reprisals.²⁴⁷ In the present instance, Fornjot's destruction of the seven *Tarvos* satellites, coupled with the bombing of Telestoese military bases in Daphnis²⁴⁸ constitute acts of reprisal, in that they do not afford Fornjot any means of protection or ensuring cessation of Telestoese force.

B. Fornjot's Use of Force violates the Law governing Armed Conflict.

Fornjot's use of force constitutes a violation of the law governing armed conflict, in that it fails the test of military necessity [1], and further, is not a valid belligerent reprisal. [2]

1. Fornjot's Actions are not Justified as Militarily Necessary.

Fundamental to any exercise of force in an armed conflict is the principle that such use of force must be justified by the principle of military necessity.²⁴⁹ Military necessity can be

²⁴⁵ Gray, *supra*. note 16, 128.

²⁴⁶ Bowett, *supra*. note 125, 1; FRITS KALSHOVEN, BELLIGERENT REPRISALS, [Martinus Nijhoff: Leiden, 1971], 33.33.

²⁴⁷ Id.

²⁴⁸ *Compromis*, Para. 22, Lines 1-3.

²⁴⁹ PIETRO VERRI, DICTIONARY OF THE INTERNATIONAL LAW OF ARMED CONFLICT 75

described as a principle justifying measures which are not forbidden by the law of war and are necessary to secure a definite advantage over the enemy.²⁵⁰ In other words, the act is justified only when it affords a definite military advantage. In the present instance, Fornjot's subsequent destruction of seven Tarvos satellites appears to offer no military advantage to Fornjot, nor is a purely defensive action against Telesto. Consequently it fails the test of military necessity and is a violation of the law of armed conflict.

2. Fornjot's Actions do not amount to a Valid Belligerent Reprisal.

Notwithstanding the indefinite legality of belligerent reprisals in the law of armed conflict, Fornjot's actions fails to comply with the provisions governing the same and accordingly constitutes a violation of the customary law governing armed conflict. Firstly, a belligerent reprisal must be in response to a violation of the *jus in bello*.²⁵¹ As Telesto's actions were wholly legal, no justification for a reprisal by Fornjot arises. Secondly, a belligerent reprisal must be in consonance with subsidiarity.²⁵² As Fornjot claims to have destroyed the *Janus* by accident, the failure to notify Telesto of such accident, and resort to force without issuing apology or clarification for the same amounts to a clear failure to comply with this requirement.

C. Fornjot is liable for the destruction of the seven *Tarvos* satellites.

Fornjot's act of destroying the seven Tarvos satellites consequently constitutes a violation of the law of self defense as well as the law governing armed conflict and is an

internationally wrongful act incurring responsibility. Consequently, it is liable to make reparation for the same. Assuming applicability of the Liability Convention to this present instance, it is clear that Fornjot is at fault by this violation of international obligations, and consequently must be held liable thereunder.

SUBMISSIONS TO THE COURT

For the foregoing reasons, the government of Telesto, Respondent, respectfully requests the Court to adjudge and declare that:

1. Telesto did not contravene international law by the military use of satellite systems by Telesto and, later, by Daphnis, pursuant to the Skoll Convention;
2. Fornjot contravened international law by the deployment of the *Hyperion* and *Rhea* satellite systems in low earth orbit;
3. Telesto did not contravene international law by refusing to promptly return to Fornjot *Bergelmir*, its cargo and its crew;
4. Fornjot liable for the destruction of *Janus* and the *Tarvos-9* and *Tarvos-24* satellites and the deaths of the individuals aboard *Janus*;
5. Telesto is not liable for the destruction of the *Rhea* and *Ijiraq* satellite systems; and
6. Fornjot is liable for the destruction of the seven *Tarvos* satellites by *Hyperion*.

(Edward Markee & Susan Mutti trans., International Community of the Red Cross 1992).

²⁵⁰ FREDERIC DE MULINEN, HANDBOOK ON THE LAW OF WAR FOR ARMED FORCES 82-3 (International Community of the Red Cross 1987); Protocol I, *Supra*. note *See also* Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 556 (July 8).

²⁵¹ *Supra*. note 132.

²⁵² *Supra*. note 132.