

THE 2013 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION

TEAM No. 1



IN THE INTERNATIONAL COURT OF JUSTICE
AT THE
PEACE PALACE, THE HAGUE

Case Concerning the Operation of a Lunar Station

THE REPUBLIC OF LYDIOS

(Applicant)

v.

THE REPUBLIC OF ENDYMION

(Respondent)

ON SUBMISSION TO THE INTERNATIONAL COURT OF JUSTICE

MEMORIAL FOR RESPONDENT

THE REPUBLIC OF ENDYMION

TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
TABLE OF AUTHORITIES	iii
QUESTIONS PRESENTED.....	vii
STATEMENT OF FACTS	viii
SUMMARY OF ARGUMENT	xvi
ARGUMENT	1
I. LYDIOS VIOLATED INTERNATIONAL LAW BY UNILATERALLY IMPOSING THE MOON PROTECTION ACT, INCLUDING THE DEMAND THAT ENDYMION VACATE FORTUNA	1
A. Lydios’ Promulgation of the MPA Violates the OST Because the MPA Contravenes the Principles of Common Use and Mutual Cooperation in Outer Space.....	1
1. The MPA Violates the Principles of Free Access and Non-Appropriation of the Moon Under Articles I and II of the OST	2
2. The MPA Violates Lydios’ Obligation Under Article XII of the OST Which Requires That it Keep its Lunar Stations Open to Representatives of Other States Parties.....	4
3. By Unilaterally Enacting the MPA, Lydios Failed to Show Due Regard to the Space Activities of Other Nations as Required by OST Article IX5	5
B. Even if the MPA is Not a Violation of International Law, it is Nevertheless Unenforceable Against Endymion.....	6
1. Because International Law Prevails Over Domestic Law, the MPA Cannot be Enforced in Light of Lydios’ OST Treaty Obligations	6
2. Lydios Transferred its Jurisdiction and Control of Luna-1 and Therefore Could Not Demand that Endymion Leave the Lunar Base	7
3. Lydios Does Not Have Jurisdiction Under Principles of Customary International Law to Enforce the MPA Against Other States	9
a. The MPA Cannot Be Enforced as an Exercise of Territorial Jurisdiction Because the Moon is not the Territory of Any One State.....	9
b. The MPA Cannot be Enforced as an Exercise of Quasi-Territorial Jurisdiction Because Quasi-Territorial Jurisdiction is Inapplicable to Space Objects, and Because the MPA Seeks to Exclude States from Areas Never Under the Jurisdiction and Control of Lydios..	10
II. LYDIOS VIOLATED INTERNATIONAL LAW BY REFUSING TO PERMIT THE BENNU TO DOCK AT DIANA	11
A. Lydios Violated its Duty to Render All Possible Assistance to Astronauts in Outer Space Under Article V of the OST	12
1. Lydios Ignored the Bennu’s Distress Calls in Disregard of its OST Obligation to Render All Possible Assistance to Astronauts.....	12

2.	The OST Obligation to Render All Possible Assistance Applies to All States as a Principle of Customary International Law	13
B.	Lydios Violated its Duty to Assist the Bennu Under Article 3 of the ARRA	14
1.	Lydios Received Information that the Personnel on Board the Bennu Were in Need of Assistance.....	14
2.	The Duty to Rescue Under Article 3 of the ARRA Includes the Obligation to Render Assistance to Spacecraft Alighting Toward the Moon.....	15
3.	Lydios was in a Position to Offer Assistance to the Bennu	15
4.	Lydios’ Duty to Render All Possible Assistance was not Minimized by the Availability of Alternative Assistance	16
III.	LYDIOS IS LIABLE FOR DAMAGES FOR THE FAILED DEPLOYMENT OF KANDETTA’S TWIN PROBES.....	17
A.	Lydios’ Violation of its Duty to Rescue the Bennu and its Use of the Wrong Fluid in the Hydraulic System at Fortuna Exposes Lydios to Liability Under Article III of the Liability Convention.....	18
1.	It was Lydios’ Wrongful Conduct That Led to the Loss of Kandetta’s Twin Probes	19
2.	Kandetta’s Damage is a Result of Lydios’ Breach of its International Duty to Rescue, as well as a Breach of its Duty to Exercise Due Diligence to Prevent Harm to Other States.....	20
3.	Lydios’ Breach of its International Obligations Caused the Loss of Kandetta’s Twin Probes.....	21
B.	Lydios Must Pay Damages for the Loss of Kandetta’s Twin Probes Because to Restore Kandetta to the Position it Would Have Been In Had Lydios Not Breached its International Obligations.....	22
C.	Endymion’s Claim for Indemnification from Lydios is Appropriate Under the Liability Convention	24
1.	Claims for Indemnification are Permissible Under Customary International Law Which Supplements the Terms of the Liability Convention.....	24
2.	It Would be Inequitable to Prevent Endymion’s Claim of Indemnification Against Lydios under the Liability Convention When Read in Context with OST Article VI.....	25
	SUBMISSIONS TO THE COURT	26

TABLE OF AUTHORITIES

Treaties and Multilateral Agreements

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Dec. 18, 1979, 1363 U.N.T.S. 3	11
Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119	<i>passim</i>
Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187	<i>passim</i>
Convention on the Registration of Objects Launched into Outer Space, Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15	7, 8
Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, 27. Jan. 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205	<i>passim</i>
Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331	2, 3, 7, 15, 24
Statute of the International Court of Justice, June 26, 1945, 59 Stat. 1031	2, 7
United Nations Convention on the Law of the Sea, Nov. 16, 1994, 1833 U.N.T.S. 3	10

Judicial and Arbitral Decisions

<i>Armed Activities on the Territory of the Congo</i> (Democratic Republic of the Congo v. Uganda), Judgment, 2005 I.C.J. 1 (Dec. 2005)	20
<i>Banco Nacional de Cuba v. Sabbatino</i> , 376 U.S. 398, 401 (1964)	7
<i>Case Concerning Military and Paramilitary Activities in and against Nicaragua</i> (Nicar. v. U.S.), 1986 I.C.J. 14, 43 (June 27)	2
<i>Corfu Channel (Merits)</i> (U.K. v. Alb.), 1949 I.C.J. 4 (Apr. 9)	17, 19, 21
<i>Factory at Chorzów</i> (Ger. v. Pol.), 1928 P.C.I.J. (ser. A) No. 17 (Sept. 13)	18, 22, 23
<i>The Favorite</i> , 6 R.I.A.A. 82, 85 (1921)	23
<i>Fisheries Jurisdiction Case</i> (U.K. v. Ice.), 1974 I.C.J. 3 (July 25)	5
<i>Gabčíkovo-Nagymaros Project</i> (Hung. v. Slov.), 1997 I.C.J. 7, 55 (Sept. 25)	24

<i>Greco-Bulgarian Communities</i> , Advisory Opinion, 1930 P.C.I.J. (ser. B) No 17 (July 31)	7
<i>Horace B. Parker</i> , 6 R.I.A.A 153, 154 (1925)	23
<i>International Fisheries Company</i> (U.S. v. United Mexican States) 4 R.I.A.A. 691 (1931)	7
<i>Island of Palmas Case</i> (Neth. v. U.S.), 2 R.I.A.A. 829 (1928)	3
<i>Legal Status of Eastern Greenland</i> (Denmark v. Norway), 1933 P.C.I.J., Ser. A/B, No. 53 (Apr. 5)	9
<i>The Lotus Case</i> (France v. Turkey), 1927 P.C.I.J., Ser. A, No. 10 (Sept. 7)	9
<i>North Sea Continental Shelf</i> (F.R.G. v. Den./F.R.G. v. Neth.), 1969 I.C.J. 3 (Feb. 20)	13
<i>Trail Smelter Arbitration</i> (U.S. v. Can.), 3 R.I.A.A. 1911 (U.S.-Can. Arb. Trib. 1941)	17
<i>United States Diplomatic and Consular Staff in Tehran Case</i> , 1980 I.C.J. 3 (May 24)	21
<i>The Wanderer</i> , 6 R.I.A.A. 68, 76 (1921)	23

United Nations Documents, Reports, and Resolutions

Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962 (XVII), U.N. Doc. A/RES/1962(XVII) (Dec. 13, 1963)	1
Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, G.A. Res. 62/68, Annex, U.N. GAOR, 62 nd Sess., U.N. Doc. A/Res/62/58 (2008)	20
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 (2001)	1, 18, 19, 21, 24
Application of the concept of the “launching State”, G.A. Res. 59/115, U.N. Doc. A/RES/59/115 (Jan. 25, 2005)	8
Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects, G.A. Res. 62/101, U.N. Doc. A/RES/62/101 (Jan. 10, 2008)	8

Books and Treatises

Bin Cheng, <i>General Principles of International Law as Applied by International Courts and Tribunals</i> (1987)	<i>passim</i>
Bin Cheng, <i>Studies in International Space Law</i> (1997)	4, 9, 10

Carl Q. Christol, <i>The Modern International Law of Outer Space</i> (1982).....	7, 17, 24
Delbert D. Smith, <i>Space Stations: International Law and Policy</i> (1979)	22
Francis Lyall and Paul B. Larsen, <i>Space Law: A Treatise</i> (2009)	7, 8, 11, 13
Gbenga Oduntan, <i>Sovereignty and Jurisdiction in Airspace and Outer Space</i> (2012)	11
George Schwarzenberger, <i>International Law as Applied by International Courts and Tribunals</i> Vol. I (3d ed. 1957)	23
Nandasiri Jasentuliyana & Roy S. K. Lee, <i>Manual on Space Law: Volume I</i> (1979)	<i>passim</i>
Valérie Kayser, <i>Launching Space Objects: Issues of Liability and Future Prospects</i> 26 (R. Jakhu et al. eds. 2001)	2
William A. Hyman, <i>Magna Carta of Space</i> (1966)	12
Articles	
Carl Q. Christol, <i>International Liability for Damage Caused by Space Objects</i> , 74 Am. J. Int'l L. 346 (1980)	25
Elena Kamenetskaya, <i>The Present Developments of Legal Regulations of Space Activities in</i> <i>Russia and Commonwealth of Independent States</i> , 26 Akron L. Rev. 465 (1993)	10
<i>Events of Interest</i> , 22 J. Space. L 115, 155 (1994)	23
Henry R. Hertzfeld & Frans G. von der Dunk, <i>Bringing Space Law into the Commercial World:</i> <i>Property Rights Without Sovereignty</i> , 6 Chi. J. Int'l L. 81, 89 (2005)	8
J. Clark Kelso, <i>The United Nations Convention on Contracts for the International Sale of Goods:</i> <i>Contract Formation and the Battle of the Forms</i> , 21 Colum. J. Transnat'l L. 529 (1982- 1983)	8
Jefferson H. Weaver, <i>Illusion or Reality? State Sovereignty in Outer Space</i> , 10 B.U. Int'l L.J. 203, 232 (1992)	3
Jennifer A. Purvis, <i>The Long Arm of the Law? Extraterritorial Application of U.S.</i> <i>Environmental Legislation to Human Activity in Outer Space</i> , 6 Geo. Int'l Envtl. L. Rev. 455 (1994)	9
Mark J. Sundahl, <i>The Duty to Rescue Space Tourists and Return Private Spacecraft</i> , 35 J. Space L. 162 (2009)	12, 13, 14, 15, 17

Michael C. Mineiro, <i>FY-1C and USA-193 ASAT Intercepts: An Assessment of Legal Obligations Under Article IX of the Outer Space Treaty</i> , 34 J. Space L. 321 (2008)	5
Paul G. Dembling and Daniel M. Arons, <i>The Treaty on Rescue and Return of Astronauts and Space Objects</i> , 9 Wm. & Mary L. Rev. 630, 646 (1967-1968)	16
Stephan Hobe, <i>Legal Aspects of Space Tourism</i> , 86 Neb. L. Rev. 439 (2007)	18
T.L. Stein, <i>The Approach of the Different Drummer: The Principle of the Persistent Objector in International Law</i> , 26 Harv. Int. L.J. 457 (1985)	14

Other Materials

Black’s Law Dictionary (9th ed. 2009)	3
NASA’s Recommendations to Space-Faring Entities: How to Protect and Preserve the Historic and Scientific Value of U.S. Government Lunar Artifacts (July 20, 2011) http://www.nasa.gov/pdf/617743main_NASA-USG_LUNAR_HISTORIC_SITES_RevA-508.pdf	4, 6
New Oxford American Dictionary (2001)	15
Restatement (Second) Law of Contracts (1981)	8
Restatement (Third) of Foreign Relations Law of the United States (1987)	9
Special Agreement Between the Republic of Lydios and the Republic of Endymion	<i>passim</i>
Special Agreement Between the Republic of Lydios and the Republic of Endymion, Response to Requests for Clarification	5
United Nations Office for Outer Space Affairs, <i>Status of International Agreements relating to Activities in Outer Space</i> , http://www.unoosa.org/oosa/en/SpaceLaw/treatystatus/index.html (last visited Mar. 11, 2013)	14

QUESTIONS PRESENTED

1. Did Lydios violate international law when it enacted the Moon Protection Act and demanded that Endymion vacate Luna-1?
2. Did Lydios violate international law when it refused to allow the Bennu to dock at Diana?
3. Is Lydios liable for damages for the loss of Kandetta's twin probes?

STATEMENT OF FACTS

1. The Republic of Endymion (“Endymion”) and the Republic of Lydios (“Lydios”) are both advanced spacefaring nations that have been members of the Artemis Operation Agency (“AOA”) since 2001.¹
2. The AOA is an international intergovernmental organization, comprised of 15 member States, which operates a lunar orbiting platform named Artemis pursuant to the Artemis Implementing Agreement (“AIA”).² The Artemis platform is used to conduct scientific experiments, deploy satellites into lunar orbit, and to deploy other spacecraft such as interplanetary probes.³ Artemis was registered with the United Nations by the AOA.⁴
3. Because of the success of the Artemis project, the AIA was later amended to allow the commercial use by a non-member to the AOA upon approval of at least three quarters of AOA member states.⁵
4. The Kingdom of Kandetta (“Kandetta”) is an island nation that is politically isolated.⁶ It has been developing its own indigenous space capability, including launch vehicles and satellites, but has suffered several failed launches.⁷
5. In 2002, Kandetta announced that it planned to transport several satellites to Artemis by its new manned space launch vehicle named Bennu.⁸ Kandetta received an affirmative

¹ Special Agreement Between the Republic of Lydios and the Republic of Endymion ¶ 1-2 [hereinafter *Compromis*].

² *Id.* ¶ 2.

³ *Id.*

⁴ *Id.*

⁵ *Id.* ¶ 3.

⁶ *Id.* ¶ 7.

⁷ *Id.*

⁸ *Id.* ¶ 10.

response from 13 members of the AOA for its use of Artemis.⁹ In 2004, the Benu was successfully launched and placed several satellites into orbit.¹⁰

6. One of the satellites launched by the Benu in 2004 was called the Toriton-1, a satellite built by a company headquartered in Kandetta, Toriton Space Co.¹¹ Toriton Space Co. built Toriton-1 under an agreement with a non-governmental pro-environment organization headquartered in Lydios called Hekate.¹² Hekate opposed exploration and use of the Moon and intended to use the Toriton-1 to monitor activities that could disrupt the Moon's environment.¹³
7. Lydios had established and operated a manned complex on the Moon called Luna-1, which was comprised of several structures, each of which had a docking port to accommodate shuttle transport vehicles between the Earth and the Moon.¹⁴ All of the structures of Luna-1 utilized a Lydios proprietary docking port design.¹⁵ Lydios, Endymion, and the three other member States of the AOA that operated manned reusable transport vehicles to the Artemis platform utilized this same docking port design.¹⁶
8. Lydios' economy suffered a substantial decline due to an economic downturn in the last decade of the 20th Century.¹⁷ To raise revenue, Lydios auctioned off several of its space artifacts, including one lunar rover called Messenger-3.¹⁸ Messenger-3 was purchased by

⁹ *Id.* ¶ 10.

¹⁰ *Id.* ¶ 12.

¹¹ *Id.* ¶ 8.

¹² *Id.* ¶ 6

¹³ *Id.*

¹⁴ *Id.* ¶ 4.

¹⁵ *Id.* ¶ 14.

¹⁶ *Id.*

¹⁷ *Id.* ¶ 5.

¹⁸ *Id.*

Mr. Amytas Billippo, a citizen of Endymion, who received a certificate of title to Messenger-3.¹⁹

9. Lydios' economy continued to suffer and in 2005, it declared that it was abandoning the Luna-1 facility to the States parties of the Outer Space Treaty.²⁰ In January 2006, Endymion announced that it planned to establish a lunar station for tourists to visit Luna-1, and Mr. Billippo granted his consent to Endymion to use Messenger-3 for that purpose.²¹ Endymion subsequently announced that it had chosen one of the Luna-1 structures, named Fortuna, as its primary tourist facility.²² Lydios did not respond to these announcements.²³
10. In early 2007, Endymion was occupying Fortuna on a full time basis²⁴ and was processing and utilizing lunar resources.²⁵ During that time, several other nations implemented programs to occupy Luna-1 without objection by Lydios.²⁶
11. In December 2007, Lydios announced its intention to return to the Moon and reactivate Diana, one of the Luna-1 facilities.²⁷ Lydios returned to Diana by November 2008.²⁸ Because Diana and Fortuna are on opposite ends of the Luna-1 complex, the personnel of Endymion and Lydios did not encounter each other during the reactivation of Diana.²⁹

19

Id.

20

Id. ¶ 13.

21

Id.

22

Id.

23

Id.

24

Id. ¶ 15.

25

Special Agreement Between the Republic of Lydios and the Republic of Endymion, Response to Requests for Clarification ¶ 15 [hereinafter *Clarifications*].

26

Compromis ¶ 15.

27

Id. ¶ 16.

28

Id.

29

Id.

12. In August 2010, Kandetta announced that it would launch two twin probes from the Artemis platform to explore Comet Donkelson, a short-period comet with an orbit of 20 years that would come within 0.0628 AU from Earth.³⁰ These probes would be transported to Artemis using the Bennu spacecraft.³¹
13. In June 2011, Hekate released images obtained by Toriton-1 that showed changes to the lunar surface and subsurface.³² The images sparked protests in Lydios and elsewhere.³³ In response, Lydios declared in January 2012 that it would terminate its program on Luna-1 by the end of 2012.³⁴ Lydios decided to take staged steps to terminate its lunar operations, and Diana was planned to be operational until the end of that process.³⁵
14. In April 2012, Lydios promulgated the Moon Protection Act (“MPA”).³⁶ The MPA designated 23 three-dimensional buffer zones requiring prior approval of Lydios to enter, including the Luna-1 and Messenger-3 area consolidated into one zone, and 16 additional zones for separate objects launched by Lydios, as well as the six sites of the United States’ Apollo landings.³⁷ The MPA prohibited tourism and other commercial activities within all of these zones.³⁸ The final provision of the MPA asserted Lydios’ jurisdiction and control over the Luna-1 facility and demanded that all States occupying or using any

³⁰ *Id.* ¶ 17.

³¹ *Id.*

³² *Id.* ¶ 18.

³³ *Id.*

³⁴ *Id.* ¶ 19.

³⁵ *Id.*

³⁶ *Id.* ¶ 20.

³⁷ *Id.*

³⁸ *Id.*

structure within Luna-1 cease and desist their activities and vacate the zone within six months.³⁹

15. Endymion informed Lydios by diplomatic note that it did not recognize the authority of Lydios to impose the MPA on Endymion's activities.⁴⁰

16. In November 2012, Kandetta conducted the second launch of the Bennu transport vehicle to Artemis, with three persons on board, one of which was Mr. Billippo as a paying tourist.⁴¹ The Bennu was carrying Kandetta's two comet probes for deployment.⁴² During pre-deployment checkout while the Bennu was en route to Artemis, the crew determined that one of the probes had developed a propellant leak.⁴³ The crew had the ability to repair the leak and refill the probe's fuel tank with propellant from the Bennu's own tanks, but if that was done, the Bennu would not have sufficient propellant to dock at Artemis, deploy both space probes, and safely return to Earth.⁴⁴ However, the Bennu had the capability to travel directly to Luna-1 and refuel from resources processed at its facilities, which would enable the spacecraft to complete its mission and safely return to Earth.⁴⁵

17. The crew of the Bennu repaired the leak on the space probe but did not transfer propellant to it.⁴⁶ The commander of the Bennu, Mr. N. Pekki, decided to request refueling from the Diana facility, as it was known to have a reserve of processed fuel and was nearest from

39

Id.

40

Id. ¶ 21.

41

Id. ¶ 22.

42

Id.

43

Id.

44

Id.

45

Id.

46

Clarifications ¶ 22.

the navigational point of the Bennu when the commander decided to go to the Moon.⁴⁷

Mr. Pekki contacted the director of Diana, Ms. G. Ushojon and requested permission to visit Diana and to obtain propellant, but the request was denied.⁴⁸ Mr. Pekki repeated his request, and added that the propellant was necessary for the lives and safety of the personnel of the spacecraft and that his government would be responsible for the reasonable cost of the fuel.⁴⁹ Ms. Ushojon again refused.⁵⁰

18. Mr. Pekki then contacted Fortuna and requested permission to dock and obtain propellant.⁵¹ This request was granted, but a malfunction occurred in the docking mechanism of Fortuna that prevented the Bennu from successfully docking.⁵² The Bennu returned to Earth and Kandetta's mission to launch the comet probes was declared a failure.⁵³

19. An investigation panel convened by the AOA concluded that the inability of the Bennu to dock at Fortuna was caused by the use of the wrong fuel in a sealed canister in the hydraulic systems of the docking mechanism on Fortuna when Lydios constructed it.⁵⁴ The correct fluid would support an unlimited number of dockings, but the wrong fluid degraded with each use and eventually failed.⁵⁵ The panel further concluded that Lydios

47 *Compromis* ¶ 23.

48 *Id.*

49 *Id.*

50 *Id.*

51 *Id.* ¶ 24.

52 *Id.*

53 *Id.*

54 *Id.* ¶ 25.

55 *Id.*

had used the correct fluid in the docking mechanisms of Diana and all of the other Luna-1 structures.⁵⁶

20. After the AOA's investigation, Kandetta filed a formal claim with Endymion for damages for the loss of its twin probes.⁵⁷ Endymion promptly delivered a diplomatic note to Lydios demanding that Lydios indemnify Endymion for any amount it may pay to Kandetta for damages.⁵⁸ Endymion filed a formal protest to Lydios for the refusal to grant permission for Bennu to dock and stated that such refusal placed the life and safety of Mr. Billippo, as well as the Kandetta crew, in jeopardy.⁵⁹

21. Lydios responded to Endymion's note with a letter to Endymion's ambassador denying liability and stating that Endymion's continued use of Fortuna was unauthorized.⁶⁰ Lydios demanded that Endymion immediately vacate Luna-1 and also stated that it was not responsible for the failed deployment of Kandetta's twin probes.⁶¹

22. Unable to resolve this dispute through diplomatic negotiations, Lydios and Endymion have agreed to submit the dispute to the International Court of Justice for binding adjudication.⁶² Before the Court:

- a. Lydios asks the Court to declare that:
 - i. Endymion violated international law by failing to comply with the MPA including the failure to vacate Luna-1 when demanded by Lydios;

⁵⁶ *Id.*
⁵⁷ *Id.* ¶ 26.
⁵⁸ *Id.*
⁵⁹ *Id.*
⁶⁰ *Id.*
⁶¹ *Id.*
⁶² *Id.* ¶ 27.

- ii. Lydios acted in conformity with international law by declining to grant permission for the Bennu to dock at Diana; and
- iii. Lydios is not liable for damages for the failed deployment of Kandetta's twin probes.

b. Endymion asks the Court to declare that:

- i. Lydios violated international law by unilaterally imposing the MPA including the demand that Endymion vacate Fortuna;
- ii. Lydios violated international law by refusing to permit the Bennu to dock at Diana; and
- iii. Lydios is liable for damages for the failed deployment of Kandetta's twin probes.⁶³

23. Lydios and Endymion are States Parties to the 1968 Outer Space Treaty, the 1968 Return and Rescue Agreement, the 1972 Liability Convention, the 1975 Registration Convention, and the Vienna Convention on the Law of Treaties. Endymion acceded to the 1979 Moon Agreement. Kandetta is a State Party to the Return and Rescue Agreement. Lydios, Endymion, and Kandetta are Member States of the United Nations.⁶⁴

⁶³

Id.

⁶⁴

Id. ¶ 28.

SUMMARY OF ARGUMENT

Lydios violated several of its treaty obligations when it enacted and attempted to enforce the Moon Protection Act (“MPA”) against Endymion. Under Article I of the Outer Space Treaty, all States must have free access to all areas of the Moon. Similarly, Article II of the Outer Space Treaty prohibits appropriation of the Moon by claim of sovereignty or by any other means. The MPA contravenes both of these Articles by drawing territorial boundaries around certain designated areas of the Moon. The MPA also violates Article XII of the Outer Space Treaty, which requires that States keep lunar stations open to representatives of other States Parties. By entirely closing access to Luna-1 absent Lydios’ prior consent, the MPA gives Lydios a veto right over the right of access in contravention of Article XII. Additionally, by unilaterally enacting the MPA, Lydios disregarded its obligation to show due regard to the space activities of other nations as required by Article IX of the Outer Space Treaty.

Even if the MPA is not itself a violation of international law, it is nevertheless unenforceable against Endymion for three reasons: first, Outer Space Treaty principles supersede Lydios’ domestic legislation; second, Lydios had transferred ownership to the Luna-1 and therefore did not have jurisdiction and control over the facility when it enacted the MPA; and third, there is no basis of jurisdiction under customary international law to enforce the MPA against other States.

Lydios also violated several principles of international law when it refused to allow the Benu to dock at Diana. Lydios had a duty to render all possible assistance to other astronauts when carrying on activities in outer space under Article V of the Outer Space Treaty. Lydios’ duty to rescue under this provision at least encompassed the obligation to open its port to the Benu to allow the vessel to refuel. Additionally, Lydios’ obligation under this provision applies

to all states, including Kandetta, as a principle of customary international law. Lydios also had a duty to rescue the Bennu under Article 3 of the Return and Rescue Agreement because the Bennu was alighting toward the Moon. Lydios had received information that the Bennu was attempting to land on the Moon, a place not under the jurisdiction of any State, and Lydios was in a position to render such assistance. The duty under Article 3 was incumbent on Lydios regardless of the cause of the Bennu's distress or the availability of alternative locations for an attempted landing. As soon as the Bennu requested assistance, Lydios was obligated to render such assistance; the space treaties embody a general concern for human safety and Lydios ignored this basic principle when it denied the Bennu access to Diana.

Finally, Lydios is liable for damages for the failed deployment of Kandetta's twin probes. Lydios is at fault for the loss under Article III of the Liability Convention because its internationally wrongful conduct was the cause of Kandetta's damage. Lydios must pay damages for Kandetta's loss, including economic damages from the failed deployment of Kandetta's probes, in order to restore Kandetta to the position it would have been in had Lydios not breached its international obligations, as required by Article XII of the Liability Convention. Furthermore, Endymion's claim for indemnification is appropriate under the Liability Convention. Indemnification is permissible under customary international law, which supplements the terms of the Liability Convention, and because Lydios is wholly responsible for the damage sustained by Kandetta, it should be equitably estopped from avoiding liability under the Convention on the technicality that Endymion is not a joint launching state of Luna-1. In order to remain true to the Outer Space Treaty's principle that States must bear international responsibility for their conduct in outer space, Lydios must be required to indemnify Endymion for any damages it may pay to Kandetta.

ARGUMENT

I. LYDIOS VIOLATED INTERNATIONAL LAW BY UNILATERALLY IMPOSING THE MOON PROTECTION ACT, INCLUDING THE DEMAND THAT ENDYMION VACATE FORTUNA.

In promulgating the Moon Protection Act (“MPA”), the Republic of Lydios violated basic principles of international space law and attempted to give international force to domestic legislation. Despite the fact that the international community has placed great emphasis on conducting activities in outer space with mutual cooperation,¹ Lydios unilaterally enacted the MPA in an attempt to restrict access to areas of the Moon. First, the MPA violates several of Lydios’ obligations under the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (“OST”), and second, the MPA is unenforceable against Endymion.

A. Lydios’ Promulgation of the MPA Violates the OST Because the MPA Contravenes the Principles of Common Use and Mutual Cooperation in Outer Space.

Lydios’ promulgation of the MPA is a violation of several international obligations under the OST. A state breaches an international obligation when it enacts domestic legislation that conflicts with the requirements of an international obligation.² The MPA first violates Lydios’ obligation under Articles I and II of the OST, requiring free access to all areas on celestial bodies

¹ *E.g.* Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, G.A. Res. 1962 (XVII) ¶6, U.N. Doc. A/RES/1962(XVII) (Dec. 13, 1963); Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, art. IX, 27. Jan. 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter OST].

² 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, art. 12 commentary, ¶12 (2001) [hereinafter Draft Articles on State Responsibility]; Bin Cheng, *General Principles of International Law as Applied by International Courts and Tribunals* 174 (1987) [hereinafter *General Principles*] (“[T]here can be no doubt that a municipal enactment constitutes an act of the State and, as such, is capable of violating international law.”).

and prohibiting appropriation of the Moon.³ Second, the MPA violates Lydios' obligation under Article XII of the OST, which requires that stations on the Moon remain open to representatives of other States Parties to the OST.⁴ Third, by unilaterally enacting the MPA, Lydios failed to show due regard to the corresponding interests of other spacefaring States as required by Article IX of the OST.⁵

1. The MPA Violates the Principles of Free Access and Non-Appropriation of the Moon Under Articles I and II of the OST.

The MPA constitutes an attempt to appropriate certain areas of the Moon by drawing territorial boundaries in violation of Articles I and II of the OST. OST Article I provides that “there shall be free access to all areas of celestial bodies.”⁶ Expanding on the principle of free access, Article II states that “[o]uter space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.”⁷ Some scholars have determined that the principle of non-appropriation has become a norm of *jus cogens*,⁸ making it an international norm of such importance that no derogation from it is permitted.⁹

The MPA, which draws boundaries around certain areas of the Moon, violates this right of free access and constitutes “national appropriation” of those areas. Under the Vienna

³ OST, *supra* note 1, at art. I, II.

⁴ *Id.* at art. XII.

⁵ *Id.* at art. IX.

⁶ *Id.* at art. I.

⁷ *Id.* at art II.

⁸ Valérie Kayser, *Launching Space Objects: Issues of Liability and Future Prospects* 26 (R. Jakhu et al. eds. 2001).

⁹ Vienna Convention on the Law of Treaties, art. 53, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter VCLT]. The VCLT is considered declarative of customary international law. *See Case Concerning Military and Paramilitary Activities in and against Nicaragua* (Nicar. v. U.S.), 1986 I.C.J. 14, 43 (June 27). Although the views of commentators do not enter the interpretational analysis under the VCLT, such opinions can themselves have the force of law under Article 38 of the Statute of this Court. Statute of the International Court of Justice, art. 38, June 26, 1945, 59 Stat. 1031 [hereinafter ICJ Statute].

Convention on the Law of Treaties (“VCLT”), a treaty is interpreted “in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.”¹⁰ Here, “appropriation” means “a taking of possession”¹¹ and “sovereignty” means “supreme dominion, authority, or rule.”¹² In this way, Articles I and II of the OST work in tandem: because no individual nation can exercise preeminent authority over any particular area of the Moon, it cannot deny access to that area.¹³ The MPA, however, creates “buffer zones” that are meant to exclude others from certain designated areas absent prior approval from Lydios.¹⁴ The Act draws territorial boundaries requiring Lydios’ consent to enter,¹⁵ akin to a national border on Earth, and as such amounts to appropriation of those areas. Lydios further indicated its intent to exercise sovereignty over access to the Moon when it demanded that Endymion cease its activities and vacate the lunar base, indicating its desire to exercise “supreme dominion” over those areas.¹⁶ This conduct is a clear violation of the right of free access to lunar resources and constitutes an unjust usurpation of large areas of the moon.

Furthermore, current state practice indicates strong adherence to the principles of free access and non-appropriation over the Moon. For instance, the United States National Aeronautics and Space Administration (“NASA”) recently issued recommendations on how to protect and preserve the Apollo landing sites on the Moon but, in doing so, emphasized that the

¹⁰ VCLT, *supra* note 9, at art 31.

¹¹ Black’s Law Dictionary (9th ed. 2009), appropriation.

¹² *Id.*, sovereignty; *see also* *Island of Palmas Case* (Neth. v. U.S.), 2 R.I.A.A. 829 (1928).

¹³ Nandasiri Jasentuliyana & Roy S. K. Lee, *Manual on Space Law: Volume I* 11 (1979) [hereinafter *Space Law Manual*]. *See also* Jefferson H. Weaver, *Illusion or Reality? State Sovereignty in Outer Space*, 10 B.U. Int’l L.J. 203, 232 (1992) (“No state can legally assert its sovereignty over the Moon or other celestial bodies; it is, therefore, axiomatic that no state can legally prevent another state from exercising its rights under the Outer Space Treaty to explore or utilize outer space resources as it sees fit.”).

¹⁴ *Compromis* ¶ 20.

¹⁵ *Id.*

¹⁶ *Id.* at ¶ 23.

guidelines are not binding and therefore comport with the OST principles of free access and non-appropriation.¹⁷ Unlike the NASA guidelines that are admittedly only precatory,¹⁸ the MPA purports to bind all spacefaring nations, as indicated by the fact that Lydios deems it a violation of international law to not vacate Luna-1 at its request.¹⁹ Thus, The MPA violates the principles of free access and non-appropriation of Articles I and II of the OST because it unilaterally appoints Lydios as gatekeeper to the legally recognized commons of the Moon.”

2. The MPA Violates Lydios’ Obligation Under Article XII of the OST Which Requires That it Keep its Lunar Stations Open to Representatives of Other States Parties.

By entirely closing access to Luna-1, the MPA constitutes a breach of Lydios’ obligation under Article XII of the OST, which requires that “[a]ll stations, installations, equipment and space vehicles on the Moon and other celestial bodies [remain] open to representatives of other States Parties to the Treaty on a basis of reciprocity.”²⁰ The drafting history of this Article indicates that the freedom of access to lunar stations is only limited “to the point of endangering the lives of astronauts or interfering with the station’s normal operations.”²¹ Importantly, it was made clear that the language “on the basis of reciprocity” was not intended to give a right to veto another state’s access to stations and installations,²² but only to allow a contracting State to refuse access to any State that did not comply with its own obligation to allow visits to its

¹⁷ NASA’s Recommendations to Space-Faring Entities: How to Protect and Preserve the Historic and Scientific Value of U.S. Government Lunar Artifacts (July 20, 2011) http://www.nasa.gov/pdf/617743main_NASA-USG_LUNAR_HISTORIC_SITES_RevA-508.pdf [hereinafter NASA Guidelines].

¹⁸ *Id.* (“These recommendations are not legal requirements; rather they are technical recommendations for consideration by interested entities.”)

¹⁹ *Compromis* ¶ 27.

²⁰ OST, *supra* note 1, at art. XII.

²¹ Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 28.

²² Bin Cheng, *Studies in International Space Law* 250 (1997) [hereinafter *International Space Law*].

installations.²³ In contrast, the MPA creates an effective veto right over access to Luna-1 by requiring prior approval of Lydios to enter.²⁴ The legislation thus violates Article XII.

3. By Unilaterally Enacting the MPA, Lydios Failed to Show Due Regard to the Space Activities of Other Nations as Required by OST Article IX.

Lydios failed to show due regard to corresponding interests of other States Parties when it unilaterally enacted the MPA. Article IX of the OST provides, *inter alia*, that “States Parties to the Treaty shall be guided by the principle of cooperation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty.”²⁵ Although the OST does not define due regard,²⁶ international tribunals have characterized the obligation as an equity principle that requires a balancing of state interests.²⁷ For instance, in the *Fisheries Jurisdiction* case, this Court held that Iceland was not entitled to unilaterally extend the boundary of its fishing jurisdiction and thus exclude the United Kingdom from it because both states have an obligation to pay due regard to the interests of other States in the conservation and equitable exploitation of the fishery resources.²⁸ Similarly, because the OST emphasizes the need for free exploration of outer space in order to “facilitate and encourage international cooperation,”²⁹ Lydios’ unilateral act of limiting access to the certain areas of the Moon within the circumscribed buffer zones constitutes a failure to pay due regard to the interests of other states in the exploration and use of the Moon’s resources. Its demand that Endymion vacate Luna-1³⁰

²³ *Id.*; Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 28-29.

²⁴ *Compromis* ¶ 20.

²⁵ OST, *supra* note 1, at art. IX.

²⁶ See Michael C. Mineiro, *FY-1C and USA-193 ASAT Intercepts: An Assessment of Legal Obligations Under Article IX of the Outer Space Treaty*, 34 J. Space L. 321, 332-33 (2008).

²⁷ See *Fisheries Jurisdiction Case* (U.K. v. Ice.), 1974 I.C.J. 3, 40 (July 25).

²⁸ *Id.* at 34.

²⁹ OST *supra* note 1, at art. I.

³⁰ See *Clarifications* ¶ 15.

is further indicative of Lydios' disregard of Endymion's interests in exploring and utilizing the Moon's surface.

Current state practice regarding the use of outer space further supports the conclusion that Lydios' unilateral conduct is a violation of Article IX. The NASA guidelines discussed in the preceding section stress the willingness of the U.S. government to work with foreign governments in seeking to promote the development and implementation of appropriate recommendations aimed at preserving the Apollo landing sites as well as the fragile surface of the Moon.³¹ Notably, the NASA guidelines explicitly reference the U.S. government's Article IX obligations.³² In contrast, Lydios enacted and attempted to enforce the MPA without any consultation with the international community or recognition of its Article IX obligations.³³ Its conduct undeniably violates this provision.

B. Even if the MPA is Not a Violation of International Law, it is Nevertheless Unenforceable Against Endymion.

Even if the Court concludes that the MPA is not a violation of international law, it cannot be enforced against Endymion, or any other nation. First, being a piece of domestic legislation, it is superseded by international law. Second, Lydios transferred ownership over Luna-1 in 2005, and thus did not have jurisdiction and control over the lunar base when it enacted the MPA in 2012.³⁴ Third, Lydios did not have any basis of jurisdiction under principles of customary international law for enacting the MPA and could not give extraterritorial reach to its provisions.

1. Because International Law Prevails Over Domestic Law, the MPA Cannot be Enforced in Light of Lydios' OST Treaty Obligations.

³¹ NASA Guidelines, *supra* note 17.

³² *Id.*

³³ *Compromis* ¶ 20.

³⁴ *Id.* ¶ 13, 19.

The MPA cannot be enforced against Endymion in the present dispute because it is superseded by Lydios' international obligations. "[I]t is a generally accepted principle of international law that in the relations between Powers who are contracting Parties to a treaty, the provisions of municipal law cannot prevail over those of the treaty."³⁵ Although States are free to regulate conduct within their own territory,³⁶ international law prevails over domestic legislation in disputes between States.³⁷ Thus, because the OST principles discussed in Section I.A., *supra*, inevitably prevail over the MPA, Lydios cannot enforce this legislation against Endymion.

2. Lydios Transferred its Jurisdiction and Control of Luna-1 and Therefore Could Not Demand that Endymion Leave the Lunar Base.

Lydios had no authority to unilaterally regulate conduct on Luna-1 when it promulgated the MPA and demanded that Endymion leave the lunar base because Lydios had transferred its ownership of the base.³⁸ Although Article VIII of the OST requires a state to "retain jurisdiction and control" over any object that is in outer space or on a celestial body,³⁹ the space treaties permit States to transfer that jurisdiction and control.⁴⁰ The U.N. General Assembly has twice

³⁵ *Greco-Bulgarian Communities*, Advisory Opinion, 1930 P.C.I.J. (ser. B) No 17 (July 31), at ¶ 81; *International Fisheries Company*, (U.S. v. United Mexican States) 4 R.I.A.A. 691, 709 (1931) ("The supreme law of all members of the family of nations is not its domestic law but is international law.")

³⁶ See generally *Banco Nacional de Cuba v. Sabbatino*, 376 U.S. 398, 401 (1964).

³⁷ See ICJ Statute, *supra* note 9, at art 38 (requiring that disputes be decided in accordance with international law, looking first to treaties, international custom, general principles of law, and last, "judicial decisions . . . of the various nations, as subsidiary means for the determination of the rules of law."). See also VCLT, *supra* note 9, at art. 26 ("A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty").

³⁸ *Compromis* ¶ 13.

³⁹ OST, *supra* note 1, at art. VIII.

⁴⁰ See, e.g., Francis Lyall and Paul B. Larsen, *Space Law: A Treatise* 92-93 (2009) [hereinafter *Space Law Treatise*]. The Convention on the Registration of Objects Launched into Outer Space, Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15 [hereinafter Registration Convention] is silent on the issue of the transfer of space objects; because of this, the conduct is presumed to be lawful. See Carl Q. Christol, *The Modern International Law of Outer Space* 59

recognized the ability of States to transfer ownership of its space objects,⁴¹ as have space law scholars.⁴² State practice further affirms that States may lawfully transfer ownership of space objects: in 1998, the International Telecommunications Satellite Organization (“INTELSAT”) transferred ownership of five satellites to the Dutch corporation New Skies NV, and AsiaSat 1 and 2 and Apstar-I and IA were transferred from the U.K. registry to China.⁴³

Lydios’ announcement in 2005 that it was transferring the rights of the Luna-1 facility “to the States parties of the Outer Space Treaty”⁴⁴ constituted its offer to transfer ownership. When Endymion announced its intention in 2006 to utilize Luna-1 and occupied the facility in 2007 without objection from Lydios,⁴⁵ the offer to transfer ownership was accepted.⁴⁶ Although some space object transfers were conducted through a written agreement with a corresponding note made in the U.N. registry,⁴⁷ there is no requirement under international law that such a contract

(1982) [hereinafter *Modern*] (“Space law, like all international law, has gone forward on the premise that conduct is presumed to be lawful in the absence of prohibitions.”)

⁴¹ See Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects, G.A. Res. 62/101, U.N. Doc. A/RES/62/101 (Jan. 10, 2008) (recommending steps States should take following change in supervision of a space object); Application of the concept of the “launching State”, G.A. Res. 59/115, U.N. Doc. A/RES/59/115 (Jan. 25, 2005) (requesting information on State practice of transferring ownership of space objects).

⁴² Henry R. Hertzfeld & Frans G. von der Dunk, *Bringing Space Law into the Commercial World: Property Rights Without Sovereignty*, 6 Chi. J. Int'l L. 81, 89 (2005).

⁴³ Lyall and Larsen, *Space Law Treatise*, *supra* note 40, at 92, 337.

⁴⁴ *Compromis* ¶ 13.

⁴⁵ *Id.* ¶¶ 13, 15.

⁴⁶ Cf. Restatement (Second) Law of Contracts § 50 (1981); J. Clark Kelso, *The United Nations Convention on Contracts for the International Sale of Goods: Contract Formation and the Battle of the Forms*, 21 Colum. J. Transnat'l L. 529, 540-42 (1982-1983).

⁴⁷ See Registration Convention, *supra* note 40, at art. II. The *compromis* is silent on any changes in the U.N. Office of Outer Space Affairs registry regarding the transfer of Luna-1. However, it is not uncommon for states to report transfers to OOSA late, and the note made in the registry when a transfer occurs is very informal. See Lyall and Larsen, *Space Law Treatise*, *supra* note 40, at 92-93.

be executed for an agreement to be binding.⁴⁸ Here, Lydios' statement in 2005 was unconditional: it entirely relinquished its rights to Luna-1.

3. Lydios Does Not Have Jurisdiction Under Principles of Customary International Law to Enforce the MPA Against Other States.

The MPA cannot be given international force under any of the traditional bases of extraterritorial jurisdiction recognized under customary international law. The only arguably applicable basis of jurisdiction for the MPA is the territoriality principle,⁴⁹ but because neither territorial nor quasi-territorial jurisdiction applies, the law is unenforceable against Endymion.

a. The MPA Cannot Be Enforced as an Exercise of Territorial Jurisdiction Because the Moon is not the Territory of Any One State.

Because the MPA attempts to regulate conduct on the Moon, it is unenforceable against other States. Jurisdiction to prescribe laws⁵⁰ is generally based on territoriality,⁵¹ but because the Moon is not any one State's territory,⁵² extending the reach of domestic jurisdiction to the Moon is improper. Indeed, because "there can be no territorial sovereignty in outer space or on celestial bodies, there can be no exercise of territorial jurisdiction there."⁵³ Although all

⁴⁸ See *Legal Status of Eastern Greenland* (Denmark v. Norway), 1933 P.C.I.J., Ser. A/B, No. 53 (Apr. 5) at ¶ 192 (holding that it is "beyond all dispute" that an oral declaration by a government representative on behalf of the government is binding upon the country).

⁴⁹ Other bases of jurisdiction include the nationality principle (jurisdiction over the State's nationals), the protective principle (jurisdiction to protect security of a State), the passive personality principle (jurisdiction over conduct that harms the State's nationals), the effects test (jurisdiction over conduct that has a substantial effect within the State's territory), and universal jurisdiction (any State can exercise jurisdiction over universally condemned offenses, e.g., piracy). See Jennifer A. Purvis, *The Long Arm of the Law? Extraterritorial Application of U.S. Environmental Legislation to Human Activity in Outer Space*, 6 Geo. Int'l Env'tl. L. Rev. 455, 460 (1994).

⁵⁰ See Restatement (Third) of Foreign Relations Law of the United States § 401(a) (1987).

⁵¹ See, e.g., *The Lotus Case* (France v. Turkey), 1927 P.C.I.J., Ser. A, No. 10 (Sept. 7) ("Jurisdiction is certainly territorial; it cannot be exercised by a state outside its territory except by virtue of a permissive rule derived from international custom or from a convention.").

⁵² OST, *supra* note 1, at art II.

⁵³ Cheng, *International Space Law*, *supra* note 22, at 476.

spacefaring nations enact domestic legislation to regulate space exploration, those laws only regulate the conduct of the State's own nationals and do not purport to bind the activities of other States.⁵⁴ The MPA, as a piece of Lydios' domestic legislation, is no more enforceable under international law than a mere policy statement.

b. The MPA Cannot be Enforced as an Exercise of Quasi-Territorial Jurisdiction Because Quasi-Territorial Jurisdiction is Inapplicable to Space Objects, and Because the MPA Seeks to Exclude States from Areas Never Under the Jurisdiction and Control of Lydios.

Application of "quasi-territorial" jurisdiction, such as the right to regulate conduct on a State's ship on the high seas,⁵⁵ is also inapposite. The space treaties draw a clear distinction between the "jurisdiction and control" that a State maintains over its space objects under Article VIII of the OST⁵⁶ and the nationalization of other governmental property that is located outside of the State's national borders.⁵⁷ Unlike in the law of the sea, which requires that States grant their nationality to ships,⁵⁸ the international space treaties purposefully eschewed the concept of nationality in regard to space objects.⁵⁹ In contrast to the quasi-territorial jurisdiction exercised over ships, Article VIII of the OST specifies only a State's "personnel" as being within the jurisdiction of the State of registry.⁶⁰ Thus, while a State is free to legislate what conduct its nationals can engage in while in outer space, it cannot regulate conduct of nationals outside of its

⁵⁴ See, e.g., Elena Kamenetskaya, *The Present Developments of Legal Regulations of Space Activities in Russia and Commonwealth of Independent States*, 26 Akron L. Rev. 465, 468 (1993).

⁵⁵ Cheng, *International Space Law*, *supra* note 22, at 478-80.

⁵⁶ OST, *supra* note 1, at art. VIII ("A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof[.]").

⁵⁷ Cheng, *International Space Law*, *supra* note 22, at 478-80

⁵⁸ United Nations Convention on the Law of the Sea, at art. 91, Nov. 16, 1994, 1833 U.N.T.S. 3.

⁵⁹ Cheng, *International Space Law*, *supra* note 22, at 482.

⁶⁰ *Id.* at 488.

personal jurisdiction.⁶¹ The MPA is not limited to Lydios' own nationals; rather, the Act attempts to regulate conduct of anyone on the Moon which cannot be justified under quasi-territorial jurisdiction.

In any event, even if quasi-territorial jurisdiction was an appropriate basis of jurisdiction over Luna-1, the MPA is an unlawful overreach of that authority. The buffer zones created by the MPA include not only Luna-1 and other space objects launched by Lydios, but also the six sites of the United States' Apollo landings, which were never under Lydios' control, and the Messenger-3 area, which Lydios had sold to Mr. Billippo, an Endymion national.⁶² It would thus be unjust to allow Lydios to enforce the MPA against Endymion and other nations.

II. LYDIOS VIOLATED INTERNATIONAL LAW BY REFUSING TO PERMIT BENNU TO DOCK AT DIANA.

When it refused to open its dock to the Bennu, Lydios violated one of the fundamental principles of international space law: that activities in outer space be conducted in consideration of the welfare and safety of astronauts.⁶³ Specifically, Lydios had a duty to offer assistance to the Bennu under at least two⁶⁴ provisions of international law: Article V of the OST⁶⁵ and Article 3 of the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of

⁶¹ *Id.* (Recognizing that a "literal reading of Article VIII would mean that [when personnel of spacecraft A visits spacecraft B while in outer space], such personnel would remain under the jurisdiction of State A, thus preventing State B . . . from exercising jurisdiction over the visitor[.]").

⁶² *Compromis*, ¶¶ 20, 5.

⁶³ *See, e.g.*, Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, preamble, Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 [hereinafter ARRA]; Lyall and Larsen, *Space Law Treatise*, *supra* note 40, at 134.

⁶⁴ Lydios' conduct is also a violation of Article 10(2) of the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, Dec. 18, 1979, 1363 U.N.T.S. 3, which requires States Parties to "offer shelter in the stations, installations, vehicles and other facilities to persons in distress on the Moon." Although Lydios is not a party to the Moon Agreement, it cannot simply ignore its laws, as the Agreement serves as evidence of contemporary international law. *See* Gbenga Oduntan, *Sovereignty and Jurisdiction in Airspace and Outer Space* 208 (2012).

⁶⁵ OST, *supra* note 1, at art. V.

Objects Launched into Outer Space (“ARRA”).⁶⁶ Lydios’ failure to extend the minimal assistance requested constitutes a breach of each provision.

A. Lydios Violated its Duty to Render All Possible Assistance to Astronauts in Outer Space Under Article V of the OST.

Lydios’ failure to open its dock to the Benu was a violation of Lydios’ obligation under Article V of the OST to render all possible assistance to other astronauts when carrying on activities in outer space. Although Kandetta is not a party to the OST, Article V applies as a principle of customary international law.

1. Lydios Ignored the Benu’s Distress Calls in Disregard of its OST Obligation to Render All Possible Assistance to Astronauts.

Lydios’ failure to render any assistance to Kandetta was a blatant violation of the State’s Article V obligation. Article V of the OST requires that States Parties “regard astronauts as envoys of mankind in outer space” and provides that, “[i]n carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render *all possible assistance* to the astronauts of other States Parties.”⁶⁷ This obligation is broad: “[the] duty for astronauts to assist each other has the advantage of being utterly unqualified – and therefore requires such assistance under any circumstances[.]”⁶⁸ The provision has been said to be “merely a logical extension of basic morality.”⁶⁹ Lydios disregarded this obligation when it failed to allow the Benu to land at Diana. Despite being informed that refueling was “necessary for the lives and

⁶⁶ ARRA, *supra* note 63, at art 3.

⁶⁷ OST, *supra* note 1, at art. V (emphasis added). The individuals on board the Benu were “astronauts” as that term is used in the context of the treaty; an “astronaut” is a “person who travels beyond the earth’s atmosphere.” Mark J. Sundahl, *The Duty to Rescue Space Tourists and Return Private Spacecraft*, 35 J. Space L. 162, 183 (2009) [hereinafter *Duty to Rescue*]. The presence of Mr. Billippo on board the Benu, *Compromis* ¶ 22, therefore did not alter Lydios’ duty to render assistance to the spacecraft.

⁶⁸ Sundahl, *Duty to Rescue*, *supra* note 67, at 168.

⁶⁹ William A. Hyman, *Magna Carta of Space* 275 (1966).

safety of the personnel of the spacecraft,”⁷⁰ Lydios refused to extend assistance. Especially in light of the broad language of Article V, which is described as “utterly unqualified,”⁷¹ Lydios’ obligation under this provision at least encompassed a duty to open its port for the Benu to dock and allow the vessel to refuel – a cost that would have been repaid by the Kingdom of Kandetta.⁷²

2. The OST Obligation to Render All Possible Assistance Applies to All States as a Principle of Customary International Law.

Although Kandetta is not a party to the OST, the treaty provisions have passed into customary international law; the duty to render all possible assistance to astronauts in outer space therefore extends to all nations and not only those who have signed onto the treaty. Under this Court’s decision in the *North Sea Continental Shelf Cases*, treaty provisions can pass into the general corpus of international law if (1) there has been a lapse in time since the treaty came into force,⁷³ (2) non-party states have not objected to the treaty-rule,⁷⁴ and (3) a sufficient number of states have become parties to the treaty.⁷⁵ The OST meets all of these requirements.⁷⁶ Indeed, 45 years have passed since the OST entered into force in 1967, 101 nations are currently parties

⁷⁰ *Compromis* ¶ 23.

⁷¹ Sundahl, *Duty to Rescue*, *supra* note 67, at 168.

⁷² *Compromis* ¶ 23.

⁷³ *North Sea Continental Shelf* (F.R.G. v. Den./F.R.G. v. Neth.), 1969 I.C.J. 3 (Feb. 20), ¶ 74. In his dissenting opinion in *North Sea Continental Shelf*, Judge Manfred Lachs cited to space law as an example of the way in which a rule of customary international law can swiftly develop because of the acceleration of social and economic change, combined with advances in science and technology. *Id.* at 230.

⁷⁴ *Id.* at ¶ 73

⁷⁵ *Id.*; see also Lyall and Larsen, *Space Law Treatise*, *supra* note 40, at 73-74.

⁷⁶ Lyall and Larsen, *Space Law Treatise*, *supra* note 40, at 70-80.

to the treaty, including all major spacefaring nations, and there are no known objectors to its provisions.⁷⁷

B. Lydios Violated its Duty to Assist the Benu Under Article 3 of the ARRA.

Lydios also had a duty to rescue the Benu under the ARRA, and its failure to do so constitutes a breach of this treaty obligation. Article 3 of the ARRA requires that Contracting Parties “assure [the] speedy rescue” of personnel of a spacecraft when (1) the Party receives information that the personnel (2) “have alighted . . . in any . . . place not under the jurisdiction of any State” and (3) the Contracting party is in a position to render such assistance.⁷⁸ This duty is incumbent on a party regardless of the cause of the distress and the availability of alternative locations for an attempted landing.

1. Lydios Received Information that the Personnel on Board the Benu Were in Need of Assistance.

The duty to render assistance under ARRA Article 3 is triggered the moment a party receives information that personnel of a spacecraft⁷⁹ are in need.⁸⁰ Lydios was undeniably on notice of the Benu’s need for assistance when the commander of the Benu contacted the

⁷⁷ United Nations Office for Outer Space Affairs, *Status of International Agreements relating to Activities in Outer Space*, <http://www.unoosa.org/oosa/en/SpaceLaw/treatystatus/index.html> (last visited Mar. 11, 2013). Although Kandetta is not a party to the treaty, it does not qualify as an objector because objections must be consistent and open. See T.L. Stein, *The Approach of the Different Drummer: The Principle of the Persistent Objector in International Law*, 26 Harv. Int. L.J. 457 (1985).

⁷⁸ ARRA, *supra* note 63, at art 3.

⁷⁹ The members on board the Benu constituted “personnel of a spacecraft” under the ARRA. The ARRA does not provide a definition of “personnel of spacecraft,” but the drafting history of this provision indicates that the term “personnel” is purposefully broad “since everyone on board has a right to assistance for humanitarian reasons.” Sundahl, *Duty to Rescue*, *supra* note 67, at 187.

⁸⁰ Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 67.

director of Diana and requested permission to dock and obtain propellant.⁸¹ Lydios' duty to render assistance was thus triggered at that moment.

2. The Duty to Rescue Under Article 3 of the ARRA Includes the Obligation to Render Assistance to Spacecraft Alighting Toward the Moon.

The Bennu was alighting to the Moon, which, under all of the outer space treaties, constitutes a “place not under the jurisdiction of any state.”⁸² Given its plain meaning,⁸³ to “alight” means to “descend from the air.”⁸⁴ The use of this term in Article 3 makes the duty to extend assistance contingent on the landing of a spacecraft, as opposed to a duty to rescue individuals stranded in orbit or deep space.⁸⁵ Here, the Bennu was descending toward the Moon in an attempt to land there and thus came within the ambit of Article 3. Additionally, it would be inequitable in the present case to limit the meaning of “alighted” to require that a spacecraft have actually landed on the surface of the moon before the duty to rescue is triggered, as it was Lydios' refusal to permit docking that prevented such landing.

3. Lydios was in a Position to Offer Assistance to the Bennu.

When a contracting party is in the immediate vicinity of an incident and is technically capable of providing assistance, Article 3 requires that it do so.⁸⁶ Diana was the closest docking station to the Bennu when the Bennu was attempting to land on the Moon⁸⁷ and was therefore within the immediate vicinity of the incident. Also, the onus on Lydios was minimal in that all it

⁸¹ *Compromis* ¶ 23.

⁸² ARRA, *supra* note 62, at art. 3. See OST, *supra* note 1, at art. II; Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 67-68 (explaining that, because the Moon is a place not under the jurisdiction of any State, it is included in the scope of Article 3.)

⁸³ VCLT, *supra* note 9, at art. 31.

⁸⁴ New Oxford American Dictionary (2001), alight.

⁸⁵ Sundahl, *Duty to Rescue*, *supra* note 67, at 169.

⁸⁶ Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 68.

⁸⁷ *Compromis* ¶ 23.

was required to do was open its port and offer fuel, of which it had an abundance.⁸⁸ Thus, Lydios was in a position to offer assistance and was required to do so.

4. Lydios' Duty to Render All Possible Assistance was not Minimized by the Availability of Alternative Assistance.

The duty to render assistance under Article 3 arises regardless of the cause of the incident or the availability of alternative locations for an attempted landing. The distress “does not have to be originated from an emergency situation”⁸⁹ and thus the duty to render assistance applies even if the personnel seeking assistance negligently caused their distress.⁹⁰ Furthermore, assistance is still necessary in instances where the distressed astronaut has a number of alternative locations on which he might attempt a landing: “if the astronaut selects his landing spot on the basis of safety and convenience, he should not be penalized for taking account of those factors.”⁹¹ It is therefore irrelevant that the Benu might have first sought to dock elsewhere; the commander of the spacecraft decided to request fueling from Diana because it was the facility that was nearest to its navigational point when the Benu decided to go to the Moon.⁹² It is similarly irrelevant that the propellant leak was discovered at pre-deployment⁹³ and that the Benu might have decided to immediately return to Earth because the duty to rescue is not conditioned on the lack of fault of the party experiencing the distress.⁹⁴ All of the elements of Article 3 were therefore met, and Lydios’s failure to offer assistance was a breach of this obligation. Furthermore, as a matter of policy, this Court should not allow States to ignore their obligation to render assistance under Article 3 capriciously; Article 3 was enacted for

⁸⁸ *See id.*

⁸⁹ Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 67.

⁹⁰ Paul G. Dembling and Daniel M. Arons, *The Treaty on Rescue and Return of Astronauts and Space Objects*, 9 Wm. & Mary L. Rev. 630, 646 (1967-1968) [hereinafter *ARRA Article*].

⁹¹ *Id.*

⁹² *Compromis* ¶ 23.

⁹³ *Id.* ¶ 22.

⁹⁴ *See* Dembling and Arons, *ARRA Article*, *supra* note 90, at 632-33.

humanitarian purposes,⁹⁵ and Lydios blatantly ignored the potential risk to human life when it denied the Bennu docking privileges.

III. LYDIOS IS LIABLE FOR DAMAGES FOR THE FAILED DEPLOYMENT OF KANDETTA'S TWIN PROBES.

It is a basic principle of international law that a State's unlawful act creates an obligation to make integral reparation to the victim so that it can be "made whole."⁹⁶ This obligation was encapsulated in the Convention on International Liability for Damage Caused by Space Objects ("Liability Convention") as an expansion on customary international law principles of international liability.⁹⁷ First, Lydios' wrongful conduct resulted in the loss of Kandetta's probes and Lydios is liable for that loss under Article III of the Liability Convention.⁹⁸ Second, compensation for that loss is necessary to restore Kandetta "to the condition which would have existed if the damage had not occurred" under Article XII.⁹⁹ Finally, Lydios should be equitably estopped from avoiding liability under the Convention on the technicality that Endymion is not a "joint launching" state of Luna-1.¹⁰⁰ Additionally, because the standard for fault and recovery of damages is the same under customary international law as it is under Articles III and XII of the

⁹⁵ See Sundahl, *Duty to Rescue*, *supra* note 67, at 167.

⁹⁶ Cheng, *General Principles*, *supra* note 2, at 234. See also *Corfu Channel (Merits)* (U.K. v. Alb.), 1949 I.C.J. 4, at 23 (Apr. 9) [hereinafter *Corfu Channel*]; *Trail Smelter Arbitration* (U.S. v. Can.), 3 R.I.A.A. 1911 (U.S.-Can. Arb. Trib. 1941).

⁹⁷ Christol, *Modern*, *supra* note 40, at 88.

⁹⁸ Convention on International Liability for Damage Caused by Space Objects, Mar. 29, 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter *Liability Convention*]. It is irrelevant that Kandetta is not a party to the Liability Convention. The Convention only refers to "launching states" rather than contracting parties to the treaty. See, e.g., Arts. II, III, IV. The Liability Convention provisions "are intended as statements of general international law of universal application, independently of the treaty" and are "not expressly stated to be applicable only as among contracting parties." Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 99.

⁹⁹ Liability Convention, *supra* note 98, at art. XII.

¹⁰⁰ See *id.* at art V.

Liability Convention,¹⁰¹ if the Court finds that the Liability Convention is inapplicable to the present case, the standards set forth in the following discussion still control.

A. Lydios' Violation of its Duty to Rescue the Benu and its Use of the Wrong Fluid in the Hydraulic System at Fortuna Exposes Lydios to Liability Under Article III of the Liability Convention.

Article III of the Liability Convention adopts the basic standard under customary international law that a State is liable to make reparations in the event damage is due to its fault.¹⁰² The Liability Convention provides:

In the event of damage being caused elsewhere than on the surface of the Earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching State, the latter shall be liable only if the damage is due to its fault [.]¹⁰³

The docking mechanism of Fortuna and the Benu are both space objects.¹⁰⁴ Lydios and Kandetta are launching states of Luna-1 and the Benu respectively, by being the nations that procured the launch of those objects.¹⁰⁵ Lydios is liable for the failed deployment of Kandetta's twin probes because it is at fault for that loss. Under the Liability Convention and customary international law,¹⁰⁶ a state is at fault when an act or omission (1) is attributable to the state, (2)

¹⁰¹ Compare *id.* at Article III, Article XII with *Factory at Chorzów* (Ger. v. Pol.), 1928 P.C.I.J. (ser. A) No. 17 (Sept. 13) [hereinafter *Chorzów*].

¹⁰² See Cheng, *General Principles*, *supra* note 2, at 218-219.

¹⁰³ Liability Convention, *supra* note 98, at art III.

¹⁰⁴ A space object "includes component parties of a space object as well as its launch vehicle and parts thereof." *Id.* at art. I. Stations located on the Moon and other celestial bodies come within this definition. See, e.g., Stephan Hobe, *Legal Aspects of Space Tourism*, 86 Neb. L. Rev. 439, 443-44 (2007) (noting that the term "space object" includes "any object that is launched or attempted to be launched into outer space").

¹⁰⁵ The Liability Convention defines a "launching state" as a "State which launches or procures the launching of a space object." Liability Convention, *supra* note 98, at art. I.

¹⁰⁶ See *Chorzów*, *supra* note 101. See also Draft Articles on State Responsibility, *supra* note 2, at art. 2.

constitutes a breach of an international obligation of that state, and (3) is the cause of the harm suffered.¹⁰⁷

1. It was Lydios' Wrongful Conduct That Led to the Loss of Kandetta's Twin Probes.

Because the loss of Kandetta's twin probes was due to Lydios' denial of docking access to the Bennu, combined with Lydios' use of the wrong fluid in the hydraulic system of the docking mechanism on Fortuna,¹⁰⁸ the conduct in this case is attributable to Lydios. An act is attributable to a State under international law if the conduct was under the direction or control of the State¹⁰⁹ or if the State should have known of the act.¹¹⁰ Attribution is not an issue of factual causality but rather requires that there was an act of the State as opposed to, for instance, an act by private parties.¹¹¹ The *compromis* is clear that Luna-1 was built and established by Lydios acting in its governmental capacity;¹¹² any incident arising from the act of placing Luna-1 on the Moon is thus attributable to Lydios. Similarly, Diana was under government control when Lydios denied the Bennu access to its port.¹¹³ The acts leading to the loss of Kandetta's probes are thus attributable to Lydios.

¹⁰⁷ Draft Articles on State Responsibility, *supra* note 2, at art. 2.

¹⁰⁸ *Compromis* ¶ 25.

¹⁰⁹ Draft Articles on State Responsibility, *supra* note 2, at art. 8 (“The conduct of a person or group of persons shall be considered an act of a State under international law if the person or group of persons is in fact acting on the instructions of, or under the direction or control of, that State in carrying out the conduct.”); *id.* at art. 12 (conduct acknowledged or adopted by the state as its own).

¹¹⁰ *Id.* at Ch. IV, commentary, ¶ 4. (citing *Corfu Channel*, *supra* note 96).

¹¹¹ *Id.* at art 17, commentary, ¶ 2. *See also* Cheng, *General Principles*, *supra* note 2, at 181 (“[Attribution] in international law is the juridical attribution of a particular act by a physical person . . . to a State . . . whereby it is regarded as the latter's own act.”) Under the international space treaties, even conduct by private parties is attributable to a state.

¹¹² *Compromis* ¶ 4.

¹¹³ *Id.* ¶¶ 16, 23.

2. Kandetta's Damage is a Result of Lydios' Breach of its International Duty to Rescue, as well as a Breach of its Duty to Exercise Due Diligence to Prevent Harm to Other States.

The loss in the present case is a result of Lydios' failure to abide by its international obligations in two instances. Not only did Lydios disregard its duty to rescue under the OST and ARRA when it failed to allow the Benu to dock at Diana, as established in Section II, *supra*, it also failed to exercise due diligence to prevent harm to other spacefaring nations when it negligently used the wrong fluid in the docking mechanism at Fortuna.¹¹⁴

Lydios failed to use due diligence in exercising its obligations under Article XII of the OST, which, as discussed in Section I, *supra*, requires that stations on the Moon remain open to representatives of other States Parties.¹¹⁵ It is basic tenet of international law that failing to exercise due diligence to prevent harm to others can constitute a breach of international obligations,¹¹⁶ and this Court has held that due diligence requires that States take adequate measures to ensure that its activities do not harm another State.¹¹⁷ In establishing its lunar base, Lydios had an obligation to exercise due diligence to ensure that all of its obligations under the space treaties would be fulfilled in a way that would prevent harm to other States. Thus, Lydios had an obligation to ensure the safety of its docking mechanisms; because the State knew that Luna-1 would be visited by other States Parties as required under OST Article XII, it was a foreseeable risk that by using the wrong fluid in its docking mechanisms, another State would likely be injured as a result. Lydios was clearly capable of using the correct fluid; all of the other

¹¹⁴ See *id.* ¶ 25.

¹¹⁵ OST, *supra* note 1, at art. XII.

¹¹⁶ Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, G.A. Res. 62/68, Annex, U.N. GAOR, 62nd Sess., U.N. Doc. A/Res/62/58 (2008) at art. 3. See also *Armed Activities on the Territory of the Congo* (Democratic Republic of the Congo v. Uganda), Judgment, 2005 I.C.J. 1, 77-78, ¶ 256 (Dec. 2005).

¹¹⁷ *Id.* at ¶ 246.

docking mechanisms on Luna-1 were fully functional.¹¹⁸ Lydios' failure to exercise the necessary care in building the dock at Fortuna constitutes a failure to exercise due diligence in violation of customary international law.

3. Lydios' Breach of its International Obligations Caused the Loss of Kandetta's Twin Probes.

Lydios' conduct was the proximate cause of the failed deployment of Kandetta's twin probes. Proximate cause under international law involves an inquiry into the foreseeability of the harm.¹¹⁹ Determining foreseeability of an act, however, does not require that the actor actually contemplated the specific harm but rather she could and should have foreseen it: it is the standard of the reasonable person.¹²⁰ The same is true when two or more separate acts combine to cause damage; the responsible party will still be liable for damages caused, even if its conduct is only one of the combined factors that led to injury.¹²¹ This was the case in both *Corfu Channel*¹²² and the *United States Diplomatic and Consular Staff in Tehran Case* ("U.S. v. Iran").¹²³ In *Corfu Channel*, this Court found Albania liable for its failure to warn British ships of the presence of mines, even though Albania did not lay the mines itself.¹²⁴ Similarly, in *US v. Iran*, the Islamic Republic of Iran was held fully responsible for the detention of hostages, even though militant students were responsible for the initial seizure.¹²⁵ Establishing causation is even simpler here, where the two incidents that led to the damage are attributable to the same State.

¹¹⁸ *Compromis* ¶ 25.

¹¹⁹ Cheng, *General Principles*, *supra* note 2, at 249-51. *See also* Draft Articles on State Responsibility, *supra* note 2, at art 45, commentary.

¹²⁰ Cheng, *General Principles*, *supra* note 2, at 249-51.

¹²¹ *See* Draft Articles on State Responsibility, *supra* note 2, at art 45, commentary.

¹²² *Corfu Channel*, *supra* note 96.

¹²³ *United States Diplomatic and Consular Staff in Tehran Case*, 1980 I.C.J. 3 (May 24) [hereinafter *US v. Iran*].

¹²⁴ *Corfu Channel*, *supra* note 96, at 17-18.

¹²⁵ *US v. Iran*, *supra* note 123, at 29-32.

Because the Benu was short on fuel, it was foreseeable that its inability to dock and refuel could have led to property loss. Similarly, in constructing Luna-1, Lydios should have anticipated that its negligent construction of the docking mechanism in Fortuna would have resulted in property damage. These acts combined to cause the failed deployment and subsequent loss of Kandetta's twin probes and, because both acts are attributable to Lydios, it is indisputable that Lydios is at fault for that loss under Article III of the Liability Convention.

B. Lydios Must Pay Damages for the Loss of Kandetta's Twin Probes Because to Restore Kandetta to the Position it Would Have Been In Had Lydios Not Breached its International Obligations.

Lydios is wholly liable for damages as a result of the failed deployment of Kandetta's twin probes.¹²⁶ When a State is found liable under Article III of the Liability Convention, damages are due in accordance with the principles under Article XII of the Convention.¹²⁷

Article XII provides:

The compensation which the launching State shall be liable to pay for damage . . . shall be determined in accordance with international law and the principles of justice and equity, in order to provide such reparation in respect of the damage as will restore the . . . State . . . on whose behalf the claim is presented to the condition which would have existed if the damage had not occurred.¹²⁸

Under the Convention, "damage" includes "loss of or damage to property."¹²⁹ Here, Kandetta has suffered economic damages as a result of the failed deployment of its twin probes and

¹²⁶ See Jasentuliyana & Lee, *Space Law Manual*, *supra* note 13, at 117-19 (explaining that "fault" under Article III of the Liability Convention can mean that "a state becomes liable for the totality of the damage as soon as it has been established that there is fault on its part, and there is a causal [connection] between this fault and the damage.").

¹²⁷ Delbert D. Smith, *Space Stations: International Law and Policy* 121 (1979).

¹²⁸ Liability Convention, *supra* note 98, at art. XII; *see also* Chorzów, *supra* note 101, at 47 ("[R]eparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed.")

¹²⁹ Liability Convention, *supra* note 98, at art I(a).

compensation must be made to restore the State to the condition that would have existed had Lydios not violated its international obligations.

International tribunals have generally awarded damages that are deemed as natural, normal, or otherwise predictable.¹³⁰ In other words, damages are compensable if they would arise in the ordinary course of events.¹³¹ Economic damages such as lost profits have been widely recognized by international tribunals as the sort of damages that arise in the ordinary course.¹³² Indeed, the PCIJ recognized in *Chorzow Factory* that certain economic damages including lost profits are compensable, even if some are deemed too remote to justify recovery.¹³³ Similarly, in *The Cape Horn Pigeon*, the Arbitrator held that “[t]he general principles of civil law, according to which damages ought not only to include compensation for injuries suffered, but also for loss of profit, is equally applicable in international disputes.”¹³⁴ The arbitrator went on to explain that, even if lost profits cannot be calculated with certainty, it is sufficient “to show that the act complained of has prevented the making of a profit which would have been possible in the ordinary course of events[.]”¹³⁵ Kandetta’s space probes, if successfully launched, presumably would have provided the State with valuable scientific information¹³⁶ and, although the *compromis* is silent on the value of that loss, it is clearly compensable.

¹³⁰ George Schwarzenberger, *International Law as applied by International Courts and Tribunals* Vol. I, 669 (3d ed. 1957).

¹³¹ Cheng, *General Principles*, *supra* note 2, at 248.

¹³² *The Wanderer*, 6 R.I.A.A. 68, 76 (1921); *The Favorite*, 6 R.I.A.A. 82, 85 (1921); *Horace B. Parker*, 6 R.I.A.A. 153, 154 (1925).

¹³³ *Chorzów*, *supra* note 101, at 57.

¹³⁴ Cheng, *General Principles*, *supra* note 2, at 248 (citing *The Cape Horn Pigeon*, U.S.F.R. (1902), Appx I, 467, 470-71).

¹³⁵ *Id.*

¹³⁶ *See Events of Interest*, 22 J. Space. L 115, 155 (1994).

C. Endymion’s Claim for Indemnification from Lydios is Appropriate Under the Liability Convention.

Endymion has properly asserted this claim for indemnification against Lydios¹³⁷ under the Liability Convention. Although Article V of the Convention only discusses claims for indemnification “to other participants in [a] joint launching,” which is not the case here, the Convention should be read to allow claims for indemnification in any instance of alleged joint liability. First, indemnification is permissible under customary international law, which supplements the terms of the Liability Convention. Second, because Lydios is wholly responsible for the damages sustained by Kandetta, it should be equitably estopped from avoiding liability under the Convention.

1. Claims for Indemnification are Permissible Under Customary International Law Which Supplements the Terms of the Liability Convention.

Claims for indemnification are presumptively permissible under customary international law and are therefore also permissible under the Liability Convention. The Liability Convention supplements – it does not supplant – customary international law liability principles.¹³⁸ The Draft Articles on State Responsibility, which this Court has recognized as a statement of international law,¹³⁹ addresses the situation where more than one State is responsible for the damage caused to a third State. Article 47 provides that, although each State is separately responsible for conduct attributable to it, a State that is jointly liable may have a “right of recourse against the other responsible States.”¹⁴⁰ Although Endymion does not concede liability, in the event that damages are assessed against Endymion as a result of Kandetta’s claim against it, this Court should allow Endymion to seek indemnification.

¹³⁷ *Compromis* ¶ 26.

¹³⁸ See Christol, *Modern*, *supra* note 40, at 88-90; VCLT, *supra* note 9, Preamble.

¹³⁹ See, e.g., *Gabčíkovo-Nagymaros Project (Hung. v. Slov.)*, 1997 I.C.J. 7, 55 (Sept. 25).

¹⁴⁰ Draft Articles on State Responsibility, *supra* note 2, at art 47, commentary.

2. It Would be Inequitable to Prevent Endymion’s Claim of Indemnification Against Lydios under the Liability Convention When Read in Context with OST Article VI.

The Liability Convention Article V expressly allows for indemnification between joint launching states; if one jointly liable State pays compensation for damage, it has a right to present a claim for indemnification to other participants in the joint launch.¹⁴¹ Although Article V does not literally apply because Endymion is not a “launching state” of Luna-1, it would be inequitable to not allow a claim of indemnification here. The underlying assumption during the drafting of the Liability Convention was that launching states would retain ultimate control over the objects launched into space,¹⁴² but as was discussed in Section I.B, *supra*, current state practice allows for the transfer of control over space objects.¹⁴³ The literal meaning of Article V, allowing for indemnification only among joint launching states, is therefore not keeping with the current practice of spacefaring nations. In order to remain consistent with OST Article VI, which requires that a State bear international responsibility for its national activities in outer space,¹⁴⁴ the Liability Convention as a whole should be read to allow for recovery, not just from joint launching states, but from any State that is found to be responsible for damage caused. Accordingly, Article V of the Convention must be read broadly to allow for indemnification among jointly liable parties. To allow Lydios to escape liability for Kandetta’s loss on the basis of a textual technicality, that Endymion is not a joint launching state within the meaning of Article V, would be unjust. Such a result would also be contrary to the Liability Convention’s requirement that payment for damages should be made “in accordance with . . . the principles of

¹⁴¹ Liability Convention, *supra* note 98, at art. V.

¹⁴² Carl Q. Christol, *International Liability for Damage Caused by Space Objects*, 74 Am. J. Int’l L. 346, 348 (1980).

¹⁴³ See citations, *supra* note 40.

¹⁴⁴ OST, *supra* note 1, at art. VI.

justice and equity.”¹⁴⁵ Thus, in order to remain true to the OST’s requirement that States bear international responsibility for their conduct in outer space, Lydios, as the party responsible for the loss of Kandetta’s probes, must be required to indemnify Endymion for any reparations it might pay to Kandetta.

¹⁴⁵ Liability Convention, *supra* note 98, at art XII.

SUBMISSIONS TO THE COURT

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

1. Lydios violated international law by unilaterally imposing the Moon Protection Act including the demand that Endymion vacate Fortuna;
2. Lydios violated international law by refusing to permit Bennu to dock at Diana; and
3. Lydios is liable for damages for the failed deployment of Kandetta's twin probes.