2019 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION Team No. 2

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



CASE CONCERNING MILITARY USES OF SPACE RESOURCES

THE STATE OF SUNIZA
(Applicant)

v.

THE REPUBLIC OF AZASI (Respondent)

ON SUBMISSION TO THE INTERNATIONAL COURT OF JUSTICE MEMORIAL FOR THE APPLICANT

THE STATE OF SUNIZA

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	4
TABLE OF AUTHORITIES	6
QUESTIONS PRESENTED	12
STATEMENT OF FACTS	13
SUMMARY OF ARGUMENTS	19
ARGUMENTS	21
I. AZASI IS LIABLE FOR THE OCCUPATION AND USE OF EZ1 CONTRARY T INTERNATIONAL LAW AND FOR THE COSTS CHARGED BY ISPS FOR THE TRANSPORTATION OF THE CREW AND TOURISTS FROM eZ1 TO EARTH	CO 21
A. Azasi is liable for the occupation and use of eZ1 contrary to international law	21
1. Azasi is liable for the occupation and use of eZ1 under treaty law	21
1.1. Azasi violated Article I of the OST by abusing its freedom of exploration aruse of outer space	nd 22
1.2. Azasi violated Article VIII of the OST	22
1.2.1. Suniza is the State of Registry of eZ1 and therefore retains jurisdiction in eZ1	on 23
1.2.2. Evacuation of eZ1 did not affect Suniza's jurisdiction	23
1.2.3. Suniza's statement had no legal effects	24
1.2.4. Alternatively, Suniza revoked its statement	25
1.3. Azasi violated Article IX of the OST by failing to respect Suniza's interests	27
2. Azasi is liable for the occupation and use of eZ1 under customary international 1	<u>law</u> 27
2.1. Azasi violated Suniza's sovereignty	27
2.2. Azasi breached the principle of non-intervention	29
3. Azasi is liable for the occupation and use of eZ1 under general principles of law	29
3.1. Azasi violated the prohibition of unjust enrichment	30
B. Azasi is liable for the costs charged by ISpS for the transportation of the crew and tourists from eZ1 to Earth	31
1. The crew and space tourists are protected under space treaties	31

2. Azasi had an obligation to transport the crew and the tourists to Earth under multilateral space treaties	32
2.1. Azasi violated Article V of the OST	32
2.2. Azasi violated Article 4 of the ARRA	32
3. Azasi had an obligation to transport the crew and the tourists to Earth under bilateral LS Agreement	33
4. Azasi must provide reparations for the damage it caused	34
II. SUNIZA IS NOT LIABLE FOR DAMAGES FOR THE LOSS OF AZASI 7 AND LAUNCH PAD	35
A. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under treaty law	35
Suniza is not liable for damages for the loss of Azasi 7 and launch pad under treaty leading firstly, it is not liable under the LIAB (1.) and secondly, it is not liable under the OS (2.).	
1. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under the LIAB	<u>e</u> 35
1.1. Sefarite is not a space object	35
1.1.1. <i>Sefarite</i> is not a space object under the definition of a space object in Article I(d) of the LIAB	1 36
1.1.2. Sefarite is not a space object under Article II of the REG	36
1.1.3. Sefarite is not a space object under the customary rules of interpretat	tion 36
1.2. There is no causal link between infused sefarite and the explosion of Azass	i 7 37
1.3. Suniza's fault is not established	39
2. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under the OST	<u>e</u> 39
2.1. Suniza is not liable for damages for the loss of Azasi 7 and launch pad und Article VI of the OST	der 40
2.2. Suniza is not liable for damages for the loss of Azasi 7 and launch pad und Article VII of the OST	der 40
B. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under customary international law of State Responsibility	41
1. The actions attributable to Suniza are permitted under international treaty law	41
1.1. The actions are permitted under Article I of the OST	41

1.2. The actions are permitted under Article IX of the OST	42
2. The actions attributable to Suniza are permitted under international customary	<u>y law</u> 42
2.1. The actions are permitted under customary principle of sustainable development	42
SUBMISSIONS TO THE COURT	44

LIST OF ABBREVIATIONS

AI	Artificial Intelligence
ARRA	Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space
ARSIWA	2001 Articles on Responsibility of States for Internationally Wrongful Acts
COPUOS	Committee on the Peaceful Uses of Outer Space
ESA	European Space Agency
ECJ	European Court of Justice
I.C.J.	International Court of Justice
IILS	International Institute of Space Law
LIAB	1972 Convention on International Liability for Damage Caused by Space Objects
OST	1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies
P.C.I.J.	Permanent Court of International Justice
REG	1975 Convention on Registration of Objects Launched into Outer Space
U.N.	United Nations

U.N. G.A.	General Assembly of the United Nations
U.N.T.S.	United Nations Treaty Series
USA	United States of America
VCLT	1969 Vienna Convention on the Law of Treaties

TABLE OF AUTHORITIES

Treaties and other International Instruments

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, *entered into force* Jul. 11, 1984, 1363 U.N.T.S. 3.

Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched Into Outer Space, *entered into force* Dec. 3, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119.

Convention for the Unification of Certain Rules of Law Respecting Assistance and Salvage at Sea, *entered into force* 23. Sep., 1910, Art. 11, 576 U.T.S. 37.

Convention on Registration of Objects Launched into Outer Space, *entered into force* Sept. 15, 1976, 28 U.S.T. 695, 1023 U.N.T.S. 15.

Convention on International Liability for Damage Caused by Space Objects, *entered into force* Oct. 9, art. 3, 1973, 24 U.S.T. 2389, 961 U.N.T.S. 187.

Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, *entered into force* Oct. 10, 1967, Art. I, 18 U.S.T. 2410, 610 U.N.T.S. 205.

STATUTE OF THE INTERNATIONAL COURT OF JUSTICE, Art. 38, Para. 1(c)

UN CHARTER, Art. 2, Para. 1

United Nations Convention on the Law of the Sea, *entered into force* 16. Nov., 1994, art. 98, 1835 U.N.T.S. 3.

Vienna Convention on the Law of Treaties, *entered into force* Jan. 27, 1980, art. 62, 1155 U.N.T.S 331.

International courts and arbitral cases

International Court of Justice & Permanent Court of International Justice

Armed Activities on the Territory of the Congo (Democratic of the Congo v. Rwanda) 2006 I.C.J. 26-27 (Feb. 3).

Case Concerning the Factory at Chorzów (Germany v. Poland), 1928 P.C.I.J. (Ser. A) No. 17, 29,34 (Sept. 13).

Continental Shelf (Tunisia/Libya) (Judgment) 1982 I.C.J. 60 (Feb. 24).

Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua) (Merits) 2009 I.C.J. 214 (Jul. 13).

Gabčíkovo-Nagymaros Project (Hungary v. Slovakia) 1997 I.C.J. 78 (Sep. 25).

Genocide Case (Bosnia and Herzegovina v. Serbia and Montenegro) 2007 I.C.J. 233-234 (Feb. 26).

Frontier Dispute (Burkina Faso v. Republic of Mali) 1986 I.C.J. 574 (Dec. 22).

Fisheries Jurisdiction Case (Germany v. Iceland) 1973 I.C.J. 63 (Feb. 2).

Kasikili/Sedudu Island (Botswana/Namibia) I.C.J. 1999 1059 (Dec. 13).

Maritime Delimitation and Territorial Questions (Qatar v. Bahrain) (Merits) 2001 I.C.J. 115 (Mar. 16).

Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. U.S.) 1986 I.C.J. 14, 52, 53, (Jun. 27).

Navigational and Related Rights (Nicaragua v. Costa Rica) 2009 I.C.J. 243 (Jul. 13).

Nuclear Tests Cases (Australia v. France) (New Zealand v. France) (Judgment) 1974, I.C.J. 47, 253, 262, 267-269, 472-474 (Dec. 20).

Reparations for Injuries Suffered in the Service of the United Nations, Advisory Opinion, ICJ Reports 1949, 174 (Jul. 29).

Whaling in the Antarctic (Australia v. Japan) 2014 I.C.J. 255-257 (Mar. 31).

European Court of Justice

Case C-259/87 (Greece v. Commission) 1990 ECJ para. 2 (ECR I-2845).

Case T-126/01 (Vieira and others v. Commission) 2003 ECJ para. 86 (ECR II-1209).

Arbitrations

Angola Cases (Portugal v. Germany) 1928/1930, 2 R.I.A.A. 1011.

Life Insurance Claims (Germany v. United States of America) 1924, 4 R.I.A.A. 121.

Rainbow Warrior case (New Zealand v. France) (1990) XX R.I.A.A. 78.

Certain Shrimp and Shrimp Products case (India, Malaysia, Pakistan, Thailand v. USA) 1998 WTO, WTO/DS58/AB/R 62.

Flexi-Van Leasing, Inc. v Iran (US v. Iran) 1986, Iran-US Claims Tribunal Reports [Grotius Cambridge 1988].

Schlegel Corp. v NICIC (US v. Iran) 1984, Iran-US Claims Tribunal Reports [Grotius Cambridge 1988].

International Law Commission

Guiding Principles Applicable to Unilateral Declarations of States Capable of Creating Legal Obligations, with commentaries thereto, I.L.C., 58th Sess., at 369, II Y.B.I.L.C. (2006).

Eighth report on unilateral acts of States, by Mr. Víctor Rodríguez Cedeño, Special Rapporteur, I.L.C., 57th Sess., at 126-127, U.N. Doc. A/CN.4/557, pp.126,127 (2005).

United Nations Materials

G.A. Resolution 62/217, U.N. GAOR, 62nd Sess., U.N. Doc. A/RES/62/217 (2007).

G.A. Res. 2625(XXV), U.N. GAOR, 25th Sess., U.N. Doc. A/RES/2625(XXV) (1970).

Principle 3 of the Rio Declaration on Environment and Development, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol.I).

Report of the International Interdisciplinary Congress on Space Debris Remediation and On-Orbit Satellite Servicing, Scientific and Technical Subcommittee, 49th Sess., at 31, U.N. Doc. A/AC.105/C.1/2012/CRP,16 (2011).

U.N. Doc. A/AC 105/C.2/L. 10 Rev. 1. & U.N. Doc. A/AC 105/C.2/L. 2-WG 11/20.

U.N. Documents. A/AC.105/850; A/AC.105.C2/SR.03.

Books

ANTHONY AUST, MODERN TREATY LAW AND PRACTICE, 243 (2007).

BIN CHENG, GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS, 121,225 (2006).

BLACK'S LAW DICTIONARY, 508 (9TH ED. 2009)

CHARLES T. KOTUBY JR., LUKE A. SOBOTA, GENERAL PRINCIPLES OF LAW AND INTERNATIONAL DUE PROCESS, CHAPTER II (E) (2017).

CHRISTIAN BRUNNER & ALEXANDER SOUCEK, OUTER SPACE IN SOCIETY, POLITICS AND LAW, 342 (2012).

FRANS VON DER DUNK & FABIO TRONCHETTI, HANDBOOK OF SPACE LAW, 383 (2017).

FRANCIS LYALL & PAUL B. LARSEN, SPACE LAW: A TREATISE, 67, 84 (2009).

GBENGA ODUNTAN, SOVEREIGNTY AND JURISDICTION IN THE AIRSPACE AND OUTER SPACE: LEGAL CRITERIA FOR SPATIAL DELIMITATION, 31 (2012).

H.L.A. HART & A.M. HONORE, CAUSATION IN THE LAW, 104-108, 116-119 (1985)

IRMGARD MARBOE, SOFT LAW IN OUTER SPACE, 125-135 (2012).

IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW, 430 (Sixth Edition 2003).

INTERNATIONAL ACADEMY OF ASTRONAUTICS, COMMITTEE ON SAFETY, RESCUE AND QUALITY, POSITION PAPER ON ORBITAL DEBRIS, 1 (1992).

MANFRED LACHS, THE LAW OF OUTER SPACE, 79, 88-89,114 (1972).

MANFRED LACHS, THE LAW OF OUTER SPACE; AN EXPERIENCE ON CONTEMPORARY LAW-MAKING, 66,67 (2010).

MICHAEL CHATZIPANAGIOTIS, THE LEGAL STATUS OF SPACE TOURISTS IN THE FRAMEWORK OF COMMERCIAL SUBORBITAL FLIGHTS, 48 (2011).

V. KAYSER, LAUNCHING SPACE OBJECTS: ISSUES OF LIABILITY AND FUTURE PROSPECTS, 3 (2001).

Shorter works of author(s) in a collection of various authors

Bernhard Schmidt-Tedd, *Article II*, II COLOGNE COMMENTARY ON SPACE LAW, 126 (Stephan Hobe, Bernhard Schmidt-Tedd & Kai-Uwe Schrogl eds. 2013).

Martha Mejia-Kaiser, Space Law and Unauthorized Cyber Activities, in PEACETIME REGIME FOR STATE ACTIVITIES IN CYBERSPACE, 368 (Katharina Ziolkowski eds., 2013).

F.G. von der Dunk, *Legal Aspects of private manned spaceflight*, in HANDBOOK OF SPACE LAW 679, (F.G. von der Dunk, F. Tronchetti (eds), 2017).

Articles

Bin Cheng, Space Objects, Astronauts & Related Expressions, 34 Proceedings of the Thirty-Fourth Colloquium on the Law of Outer Space 17, 25 (1991)

Carl Q. Christol, International Liability for Damage Caused by Space Objects, 74(2) AM. J. INT. LAW, 368 (1980)

Gerald Fitmaurice, The Law in Procedure of the International Court of Justice, 1951-54: General Principles and Sources of Law, 30 B.Y.B.I.L. 53 (1953)

Eric Husby, Sovereignty and Property Rights in Outer Space, 3 J. Int'l L. & Prac. 359 (1994)

Frans G. von der Dunk, A Sleeping Beauty Awakens: The 1968 Rescue Agreement after Forty Years, 34 Journal of Space Law 417 (2008)

Foster, The Convention On International Liability for Damage Caused by Space Objects, If 10 Canadian Y. B. Int'l. L., p. 145-6 (1972)

Ilias Plakokefas, Causation in the Law of State Responsibility and the Problem of Overdetermination: In Search of Clarity, 26 EUR. J. INT. LAW, 471-492 (2015)

Martha Mejía-Kaiser, ESA's choice of futures: Envisat removal or first liability case, 55 PROC. 55TH COLLOQUIUM ON THE LAW OF OUTER SPACE,, 10 (2012)

Michael Chatzipanagiotis, Registration of Space Objects and Transfer of Ownership in Orbit / Zur Registrierungb von Weltraumgegenstanden und Eigentumsubertragung im Weltraum / L'Enregistrement des Objets Spatiaux et le Transfer de Propriete dans l'Espace, 56 ZLW 229 (2007)

Pacta Sunt Servanda, 53 Am. J. Int'l L. 783 (1959)

Paul B. Larsen, The Draft Space Protocol and Jurisdiction over Commercial Space Assets, 52 PROC. IISL, 485, 487, 488 (2011)

Ram Jakhu, Legal Issues relating to the Global Public Interest in Outer Space, 32 J. SPACE L. 39 (2006).

Stephan Hobbe, Article I, I COLOGNE COMMENTARY ON SPACE LAW 36 (Stephan Hobbe,

Bernhard Schmidt-Tedd & Kai Uwe Schrogl Eds., 2009)

Stephen Gorove, International Protection of Astronauts and Space Objects, 20 DePaul Law Review, 616 (1971)

Setsuko Aoki, Search of the Current Legal Status of the Registration of Space Objects, 52 PROC. IISL, 245, 248 (2011)

National law

Outer Space Act, Section 5, para. 2, (1986 as amended) (Gr. Br.).

Internet

Other

European Space Agency Planetary Protection Policy [ESA/C (2007)14].

QUESTIONS PRESENTED

- 1. Whether Azasi is liable for the occupation and use of eZ1 contrary to international law and for the costs charged by ISpS for the transportation of the crew and tourists from eZ1 to Earth.
- 2. Whether Suniza is liable for damages for the loss of Azasi 7 and launch pad.

STATEMENT OF FACTS

- 1. The State of Suniza ("Suniza") is a coastal country with a long history of successful commercial mining activity. Approximately twenty years ago, Suniza decided to embark on an ambitious program, which aimed to harness its mining expertise in order to explore celestial bodies for space resources. Subsequently, Suniza adopted a space policy focused on establishing mining operations on the Moon.
- 2. For this purpose, Suniza entered into a Launch Services Agreement ("LS Agreement") with its northern neighbor, the Republic of Azasi ("Azasi"), which possesses space transport capabilities, including human and robotic expeditions to the Moon and other celestial bodies. In the LS Agreement Suniza agreed to purchase services necessary for its lunar expedition, namely, launch and transportation services from the Earth to the Moon and from the Moon back to Earth for Suniza personnel, equipment and various unspecified resources. By agreeing to purchase these services, Suniza was able to concentrate all of its efforts on research and development of its intended lunar mining operations.
- 3. Suniza and Azasi share the same historical roots and cooperate on economic, scientific and cultural spheres. The two countries have already collaborated on joint space exploration missions, research and development in the past.
- 4. Suniza does not share the same friendly relations with St. Neo Islands, off its western shores, which is however one of the few States with technological capabilities to launch crewed missions to the Moon. Suniza and St. Neo have engaged in a centuries-long armed conflict including several land and sea battles in the second half of the 20th century.

- 5. Suniza conducted lunar research missions, in scope of which it established and fully funded a permanent lunar facility eZulwini 1 ("eZ1"). Pursuant to the LS Agreement, Azasi provided the spacecraft to transport Suniza crew.
- 6. EZ1 consisted of eight research and processing modules. The first module provided habitation and accommodation for the crew. The second habitation module, Suniza kindly reserved for accommodation for space tourists from various countries brought to the Moon by a space tourism service incorporated in Azasi. The third module served as a processing facility for food and water. The remaining five modules provided research, development and materials processing facilities. Access to the first four of these was made available to space tourists and other visitors of eZ1. After the last, Module 5, was completed, but before it commenced with its operations, representatives of Azasi were given a tour of Module 5. Thereafter, Module 5 was operated and used for accommodation by personnel from Advanced Composite Ltd ("ACS"), a private Suniza defense contractor and consumer product conglomerate, which was utilizing confidential and proprietary information.
- 7. Suniza created and powered Artificial Intelligence ("AI") robots that were used for the actual mining and programmed by Suniza personnel to extract *sefarite*, a mineral resource found only in the innermost core of certain lunar rocks. The type of lunar rock containing *sefarite* was found only in an area with dangerous slopes and jagged edges approximately 10 kilometers from eZ1. The AI robots extracted *sefarite* from the rocks and transported the ore to eZ1 for further processing by Suniza personnel.

- 8. Research and development efforts at eZ1 ascertained that *sefarite* could be purified and used as a bonding and hardening agent in plastics and steel products. Suniza paid Azasi to transport the processed *sefarite* to an ACS operated facility on the western shore of Suniza.
- 9. ACS conducted preliminary studies, which showed that *sefarite* strengthened products would find favor with consumers due to its durability and strength. ACS contracted with the Suniza Government to incorporate small amounts of *sefarite* in several various commercial and industrial products. Furthermore, Suniza made a certain amount *sefarite* available to Azasi and other States.
- 10. Separately the Suniza Defense Department ("SDD") conducted a research program examining potential military applications of *sefarite*. They found that application of very small quantities could vastly harden and improve the strength of materials. Subsequently SDD incorporated *sefarite* in several products.
- 11. Suniza encouraged full production of products strengthened by *sefarite*, and increased its funding to expand research and development of *sefarite*-based products on eZ1.
- 12. SDD research at eZ1 indicated that the hardening properties of *sefarite* were further enhanced when the purified ore was infused with oxygen in a low gravity process. Suniza therefore decided to infuse a small quantity of *sefarite* with oxygen on eZ1, in Module 5, then transport it to an ACS facility in Suniza.
- 13. In the spring of 2030 approximately 450 kg of non-infused *sefarite* ore as well as a small quantity of infused ore were loaded aboard the Azasi 7 spacecraft, bound for an ACS facility in Suniza. ACS personnel informed Azasi the cargo consisted of "*sefarite* ore". Prior to launch Azasi

conducted only a visual inspection of the cargo and did not detect any unusual or potentially harmful aspects of the cargo.

- 14. Following inspection, crew and passengers boarded Azasi 7, which was fuelled and ready for take-off. The Azasi 7 spacecraft exploded a few seconds after take-off on the lunar launch pad. Azasi 7 spacecraft and Azasi launch pad were completely destroyed. Azasi crew and a number of space tourists from various countries and brought to the Moon by Azasi, perished instantly.
- 15. Azasi requested an investigation into the probable cause of the crash. It demanded consultations with Suniza to secure the site of the crash and bring back debris to an Azasi laboratory for examination. Azasi further demanded permission to visit eZ1 to conduct investigations. Suniza responded it would review the matter.
- 16. After three months, Azasi arbitrarily assembled a team of investigators to be transported to the Moon. At that point, Suniza decided not to allow an intrusion into Module 5 of eZ1 because Module 5 was occupied by ACS, a private consumer conglomerate utilizing confidential and proprietary information.
- 17. Azasi then recalled its crew working on eZ1 and terminated all space missions with Suniza. Azasi further announced it would no longer provide human or robotic missions to support eZ1.
- 18. Unable to provide support for its crew, Suniza publicly announced it could no longer conduct activities on eZ1 and sought to evacuate the facility and transport all its personnel back home. However, Azasi refused to fulfill its obligation under the LS Agreement to transport non-Azasi personnel back to Earth. Innovative Space Solutions (ISpS), a launch services company

incorporated in St. Neo Islands, was the only transporter who agreed to transport Suniza crew and space tourists from various countries left on eZ1 by Azasi back to Earth. ISpS, however, charged and received three times the usual customary price for this type of transportation. ISpS further banned transport of any *sefarite* in its spacecraft and strictly limited the amount of personal effects that could be carried by the passengers.

- 19. Six months after the last ISpS mission, Azasi launched a mission to the Moon. Azasi team eventually gained access to the entire eZ1 facility, including the ACS Module 5. Azasi then conducted inspections of eZ1 during which they found a partially destroyed computer hard drive that ACS personnel had been forced to leave behind and which contained Suniza blueprints for the extraction of *sefarite* and the process for oxygen infusion of the ore.
- 20. Investigations of the crash site of Azasi 7 spacecraft by Azasi found traces of infused *sefarite*. Azasi issued a report, which alleged the enhanced *sefarite* was potentially unstable until bonded with other substances.
- 21. Suniza government officials explained that the methodology and findings of the Azasi panel were false and stated that Suniza's testing indicated the enhanced *sefarite* was as safe as the unenhanced purified ore.
- 22. Azasi occupied eZ1 and started processing *sefarite*. Azasi incorporated *sefarite* in various commercial products utilizing Module 5 of eZ1. Suniza protested and requested consultations with Azasi, however, Azasi refused the request.
- 23. Parties have not been able to resolve the dispute. Suniza initiated these proceedings by application to the International Court of Justice. Azasi accepted jurisdiction of the Court. The

parties submitted this Agreed Statement of Facts. At the time of submission of this Statement of Facts to the ICJ, Azasi was in sole control of eZ1 and processing *sefarite* for use in its commercial products.

24. Both Suniza and Azasi are parties to the U.N. Charter, the Outer Space Treaty, the Return and Rescue Agreement, the Liability Convention, the Registration Convention. Azasi has signed, but not ratified the Moon Agreement.

SUMMARY OF ARGUMENTS

I.

Azasi is liable for the occupation and use of eZ1 contrary to international law, on three grounds.

Firstly, Azasi is liable under treaty law, in particular, the Outer Space Treaty. Azasi violated Article I of the OST, because it abused its right to freedom of exploration and use of outer space. Azasi further violated Suniza's jurisdiction under Article VIII of the OST. Lastly, Azasi violated Article IX of the OST by failing to respect Suniza's interests.

<u>Secondly</u>, Azasi is liable under customary international law, because it violated Suniza's sovereignty and furthermore breached the principle of non-intervention.

<u>Thirdly</u>, Azasi is liable under general principles of law, because Azasi violated the prohibition of unjust enrichment.

Furthermore, Azasi is liable for the costs charged by ISpS for the transportation of the crew and tourists from eZ1 to Earth as both, crew and tourists, are protected under international space treaties. Therefore Azasi had an obligation the crew and tourists on two grounds.

Firstly, Azasi had an obligation to transport the crew and tourists under multilateral space treaties, in particular under Article V of the Outer Space Treaty and Article 4 of the Rescue Agreement. *Secondly*, Azasi had an obligation to transport them under the bilateral LS Agreement.

Therefore, Azasi must provide reparations for the damage it caused.

II.

Suniza is not liable for damages for the loss of Azasi 7 and its launch pad.

<u>Firstly</u>, Suniza is not liable pursuant to international treaty law, in particular the Liability Convention and the Outer Space Treaty. Suniza is not liable under Article III of the Liability Convention or Article V of the OST for at least one of the following arguments. *Sefarite* is not a space object. Furthermore, a causal link between infused *sefarite* and damage does not exist. Lastly, Suniza fault is not established.

<u>Secondly</u>, Suniza is not liable under the customary international law of State Responsibility, because its actions are permitted on two grounds.

Suniza's actions are permitted under international treaty law. In particular, its actions are permitted under Article I of the OST and Article IX of the OST.

Furthermore, Suniza's are permitted under customary international law, namely, the principle of sustainable development.

ARGUMENTS

I. AZASI IS LIABLE FOR THE OCCUPATION AND USE OF EZ1 CONTRARY TO INTERNATIONAL LAW AND FOR THE COSTS CHARGED BY ISpS FOR THE TRANSPORTATION OF THE CREW AND TOURISTS FROM eZ1 TO EARTH

Azasi declared it will no longer provide space transportation services for Suniza, which left Suniza with no other option but to evacuate its lunar facility eZ1 and pay three times the customary transportation price to ISpS, the only available transporter. Azasi immediately thereafter launched a mission to Suniza's eZ1, occupied it and started using it for its own benefits. Azasi is therefore liable for the occupation and use of eZ1 contrary to international law (A.). Furthermore, Azasi is liable for the costs charged by ISpS (B.).

A. Azasi is liable for the occupation and use of eZ1 contrary to international law

Azasi occupied and used Suniza's eZ1 facility without any legal justification and is therefore liable for such occupation and use of eZ1 under treaty law ($\underline{1}$.), under customary international law ($\underline{2}$.) and under general principles of law ($\underline{3}$.).

1. Azasi is liable for the occupation and use of eZ1 under treaty law

Azasi is liable for the occupation and use of eZ1 by virtue of the Outer Space Treaty (hereinafter OST), because it violated Article I of the OST by abusing its freedom of exploration and use of outer space (1.1.). It furthermore violated Article VIII by violating Suniza's jurisdiction in eZ1 (1.2.) and by failing to respect Suniza's interests, Azasi lastly violated Article IX (1.3.) of the OST.

.

¹ *Compromis*, §§12,13.

² *Ibid.*, §15.

1.1. Azasi violated Article I of the OST by abusing its freedom of exploration and use of outer space

Pursuant to Article I of the OST, States are granted freedom of exploration and use of outer space and celestial bodies.³ However, this freedom is restricted to celestial bodies and does not extend to man-made space objects, situated on them. 4 Man-made objects are subject to the jurisdiction of the State of Registry and must therefore not be interfered with.⁵ However, if a State interferes with space objects of another State, situated on celestial bodies, such exploration and use constitutes an abuse of right, prohibition of which is a general principle of international law.⁶

In the present case, eZ1 is registered on Suniza's State registry. Azasi ocupied eZ1 and started using it to commercialise the sefarite ore.⁸ Hence, Azasi infringed upon the rights of Suniza by abusing its right to freedom of exploration and use of outer space. Therefore, Azasi violated Article I of the OST.

1.2. Azasi violated Article VIII of the OST

According to Article VIII of the OST, the State of Registry retains jurisdiction in its objects launched into outer space. Azasi violated Article VIII of the OST because Suniza is the State of

³ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, entered into force Oct. 10, 1967, Art. I, 18 U.S.T. 2410, 610 U.N.T.S. 205 [hereinafter OST].

⁴ Stephan Hobbe, Article I, I COLOGNE COMMENTARY ON SPACE LAW 36 (Stephan Hobbe, Bernhard Schmidt-Tedd & Kai Uwe Schrogl Eds., 2009). ⁵ OST, Art. 8.

⁶ Certain Shrimp and Shrimp Products case (India, Malaysia, Pakistan, Thailand v. USA) 1998 WTO, WTO/DS58/AB/R 62; IAN BROWNLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW, 430 (Sixth Edition 2003); BIN CHENG, GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS, 121 (2006); Gerald Fitmaurice, The Law in Procedure of the International Court of Justice, 1951-54: General Principles and Sources of Law, 30 B.Y.B.I.L. 53 (1953); STATUTE OF THE INTERNATIONAL COURT OF JUSTICE, Art. 38, Para. 1(c) [hereinafter ICJ Statute].

⁷ Clarifications, §5.

⁸ Compromis, §§14,15; Clarifications, §1.

Registry for eZ1 and therefore retains jurisdiction in eZ1 (1.2.1.). Evacuation of eZ1 did not affect Suniza's jurisdiction (1.2.2.) and furthermore Suniza's statement had no legal effects (1.2.3.). Alternatively, Suniza revoked its statement (1.2.4.).

1.2.1. Suniza is the State of Registry of eZ1 and therefore retains jurisdiction in eZ1

In line with Article VIII of the OST, a State of Registry shall retain jurisdiction and control in its objects launched into outer space. According to doctrine and State practice, even when a space object becomes space debris the State of Registry retains jurisdiction over it. 10

In the present case, eZ1 is on Suniza national registry.¹¹ Therefore, Suniza is the State of Registry for eZ1 and retains jurisdiction and control in eZ1. Consequently, Azasi violated Article VIII of OST by occupying and using eZ1.

1.2.2. Evacuation of eZ1 did not affect Suniza's jurisdiction

States cannot abandon jurisdiction in a space object, as factual abandonment of a space object does not affect the jurisdiction of the State of Registry. Accordingly, State practice illustrates that

_

⁹ OST, Art. 8.

¹⁰ OST, Art. 8; FRANCIS LYALL & PAUL B. LARSEN, SPACE LAW: A TREATISE, 67, 84 (2009); Report of the International Interdisciplinary Congress on Space Debris Remediation and On-Orbit Satellite Servicing, Scientific and Technical Subcommittee, 49th Sess., at 31, U.N. Doc. A/AC.105/C.1/2012/CRP,16 (2011); Michael Chatzipanagiotis, Registration of Space Objects and Transfer of Ownership in Orbit / Zur Registrierungb von Weltraumgegenstanden und Eigentumsubertragung im Weltraum / L'Enregistrement des Objets Spatiaux et le Transfer de Propriete dans l'Espace, 56 ZLW 229 (2007); Online Index of Objects Launched Into Outer Space, United Nations Office for Outer Space Affairs, http://www.unoosa.org/oosa/osoindex/search-ng.jspx?lf_id=.

¹¹ Clarifications, §5.

¹² FRANCIS LYALL & PAUL B. LARSEN, SPACE LAW: A TREATISE, 67, 84, 310 (2009); Report of the International Interdisciplinary Congress on Space Debris Remediation and On-Orbit Satellite Servicing, Scientific and Technical Subcommittee, 49th Sess., at 31, U.N. Doc. A/AC.105/C.1/2012/CRP,16 (2011); Michael Chatzipanagiotis, *Registration of Space Objects and Transfer of Ownership in Orbit / Zur Registrierungb von Weltraumgegenstanden und*

derelict space objects that are no longer functioning, namely space debris, remain under the jurisdiction of their State of Registry.¹³ Such examples include Humanity Star, TS530 Zerkalo, Atlantis, Inflate Sail, Challenger, Skylab 1 and Ice Cube.¹⁴ It therefore follows that registration is the only relevant factor for determining jurisdiction.¹⁵

Suniza was unable to provide support for its crew.¹⁶ For this reason it evacuated eZ1.¹⁷ However, Suniza still has eZ1 registered on its State's Registry.¹⁸ Therefore, Suniza by evacuating eZ1 did not lose jurisdiction therein and Azasi's occupation constitutes a violation of Article VIII of the OST.

1.2.3. Suniza's statement had no legal effects

Pursuant to this Court's jurisprudence, namely, the *Nuclear Tests* and *Frontier Dispute* cases, unilateral statements limiting a State's freedom of action must be interpreted restrictively. ¹⁹ In order for a statement to have legal effects, such statement must be clear, specific and given with

_

Eigentumsubertragung im Weltraum / L'Enregistrement des Objets Spatiaux et le Transfer de Propriete dans l'Espace, 56 ZLW 229 (2007).

¹³ INTERNATIONAL ACADEMY OF ASTRONAUTICS, COMMITTEE ON SAFETY, RESCUE AND QUALITY, POSITION PAPER ON ORBITAL DEBRIS, 1 (1992).

¹⁴ U.N. Office for Outer Space Affairs, Online Index of Objects Launched into Outer Space, available on: < http://www.unoosa.org/oosa/osoindex/search-ng.jspx?lf_id=>

¹⁵ OST, Art. 8.

¹⁶ Compromis, §13.

¹⁷ Ibidem.

¹⁸ Clarifications, §5.

¹⁹ Nuclear Tests Cases (Australia v. France) (New Zealand v. France) (Judgment) 1974, I.C.J. 47, 253, 262, 267-269, 472-474 (Dec. 20) [hereinafter: Nuclear Tests case]; Frontier Dispute (Burkina Faso v. Republic of Mali) 1986 I.C.J. 574 (Dec. 22) [hereinafter: Frontier Dispute case]; Guiding Principles Applicable to Unilateral Declarations of States Capable of Creating Legal Obligations, with commentaries thereto, I.L.C., 58th Sess., at 369, II Y.B.I.L.C. (2006).

an intent to be binding.²⁰ Accordingly, when assessing such intent, all the circumstances in which the statement was made, must be taken into account.²¹

In the case at hand, Suniza stated it will no longer continue its activities on eZ1, due to its momentary incapacity to provide support for its crew on eZ1.²² Since Suniza only addressed its activities on eZ1 in unspecific terms, such statement must be interpreted restrictively and cannot affect jurisdiction. Furthermore, because the statement was made in circumstances when Suniza was temporarily unable to provide support for its crew, it lacks the intent to be binding. Hence, this statement does not create legal effects.

1.2.4. Alternatively, Suniza revoked its statement

By virtue of international law, a State may revoke its unilateral statement in case of a fundamental change in circumstances.²³ This Court observed that a fundamental change in circumstances occurs when a particular treaty obligation of a State is substantially altered.²⁴ Pursuant to Article IX of the OST, States have an obligation to prevent harmful contamination of outer space, particularly the Moon, due to the fragile nature of its environment.²⁵ Accordingly, States are required to adopt

_

²⁰ Frontier Dispute case; Nuclear Tests case; Eighth report on unilateral acts of States, by Mr. Víctor Rodríguez Cedeño, Special Rapporteur, I.L.C., 57th Sess., at 126-127, U.N. Doc. A/CN.4/557, pp.126,127 (2005).

²¹ Nuclear Tests case; Frontier Dispute case; Armed Activities on the Territory of the Congo (Democratic of the Congo v. Rwanda) 2006 I.C.J. 26-27 (Feb. 3).

²² Compromis, §§13, 15.

²³ Vienna Convention on the Law of Treaties, *entered into force* Jan. 27, 1980, art. 62, 1155 U.N.T.S 331 [hereinafter VCLT]; Fisheries Jurisdiction Case (Germany v. Iceland) 1973 I.C.J. 63 (Feb. 2) [hereinafter: Fisheries Jurisdiction case].

²⁴ Fisheries Jurisdiction case; Gabčíkovo-Nagymaros Project (Hungary v. Slovakia) 1997 I.C.J. 78 (Sep. 25) [hereinafter: Gabčíkovo-Nagymaros case].

²⁵ OST, Art. 9.

environmental protective measures.²⁶ This has been widely accepted in doctrine²⁷ and supported by numerous State practice²⁸.

In the case at hand, Suniza has a long history of commercial mining.²⁹ For more than 10 years, Suniza was conducting extensive research on *sefarite*, a mineral resource found only in an area on the Moon with dangerous slopes and jagged edges.³⁰ For this purpose Suniza alone created and powered the AI robots, used for the extraction of *sefarite*.³¹ When Azasi occupied eZ1 and started processing *sefarite*, Suniza strongly protested and demanded consultations.³²

In contrast to Suniza, which has previously conducted extensive lunar mining and discovered as well as researched *sefarite*, Azasi does not possess the same knowledge and expertise. Therefore, occupation and use of eZ1 for mining and extraction of *sefarite* with Suniza's AI robots is a potential harmful contamination of the Moon. After Azasi's occupation therefore the circumstances fundamentally changed and Suniza revoked its statement of discontinuing activities by protesting to Azasi's occupation and use.

_

²⁶ Ibidem.

²⁷ Ram Jakhu, *Legal Issues relating to the Global Public Interest in Outer Space*, 32 J. SPACE L. 39 (2006).

²⁸ Outer Space Act, Discussed infra, Section 5, para. 2, (1986 as amended) (Gr. Br.); European Space Agency Planetary Protection Policy [ESA/C (2007)14]; G.A. Resolution 62/217, U.N. GAOR, 62nd Sess., U.N. Doc. A/RES/62/217 (2007).

²⁹ Compromis, §1.

³⁰ *Ibidem.*, §1,3,5,6; *Clarifications*, §18.

³¹ *Ibid*, §5; *Clarifications*, §20.

³² *Ibid.*, §§14, 15; *Ibidem*.

1.3. Azasi violated Article IX of the OST by failing to respect Suniza's interests

According to Article IX of the OST, States are obliged to conduct their activities in outer space with due regard to the interests of other States. Furthermore, Article IX of the OST includes an obligation to conduct international consultations in cases where a planned activity may potentially interfere with activities of other States.

In the case at hand, Suniza dedicated several resources to its space program, in particular the eZ1 facility.³³ Hence, it is Suniza's main interest to continue its activities in eZ1. When Azasi caused Suniza to evacuate eZ1 and subsequently occupied it, Suniza protested and requested consultations.³⁴ However, Azasi declined the request.³⁵ In conclusion, Azasi failed to consult Suniza and did not act with due regard to Suniza's interests. It follows, Azasi violated Article IX of the OST.

2. Azasi is liable for the occupation and use of eZ1 under customary international law

Azasi is liable for the occupation and use of eZ1 under the principles of customary international law, as it violated Suniza's sovereignty (2.1.) and breached the principle of non-intervention (2.2.).

2.1. Azasi violated Suniza's sovereignty

It is a customary principle of international law, applicable to outer space and the Moon under Article III of the OST and Article 2 of the MOON, that States must respect sovereignty of other States.³⁶ Article VIII of the OST further establishes that jurisdiction in a space object belongs to

³³ *Compromis*, §§1,3,8.

³⁴ *Ibid.*, §§12,13,14,15.

³⁵ *Ibid.*, §§15.

³⁶ UN CHARTER, Art. 2, Para. 1; Corfu Channel Case (U.K. v. Albania) 1949 I.C.J. 4, 35 (Apr. 9) [Corfu Channel case]; Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. U.S.) 1986 I.C.J. 14, 52, 53, (Jun. 27) [hereinafter: Nicaragua case]; G.A. Res. 2625(XXV), U.N. GAOR, 25th Sess., U.N. Doc. A/RES/2625(XXV) (1970) [hereinafter the Friendly Relations Declaration].

its State of Registry.³⁷Jurisdiction is an aspect of sovereignty.³⁸ Consequently, Article VIII of the OST by granting the State of Registry exclusive jurisdiction in her space objects, creates sovereignty in them.³⁹

This Court decided that any intrusion into an area under the jurisdiction of another State constitutes a violation of that State's sovereignty. And Namely, in the *Nicaragua* case, the unauthorized flights over Nicaraguan territory, and in the *Corfu Channel* case, the British activities in Albanian territorial waters, constituted such an intrusion.

By registering eZ1⁴², Suniza obtained jurisdiction, and with it sovereignty in eZ1. Following Suniza's forced evacuation, Azasi gained access to eZ1, occupied, changed and furthermore started using it for processing *sefarite*, despite Suniza's protestations.⁴³ Consequently, Azasi violated Suniza State sovereignty.

_

³⁷ Setsuko Aoki, Search of the Current Legal Status of the Registration of Space Objects, 52 PROC. IISL, 245, 248 (2011); MICHAEL CHATZIPANAGIOTIS, THE LEGAL STATUS OF SPACE TOURISTS IN THE FRAMEWORK OF COMMERCIAL SUBORBITAL FLIGHTS, 48 (2011); Paul B. Larsen, The Draft Space Protocol and Jurisdiction over Commercial Space Assets, 52 PROC. IISL, 485, 487, 488 (2011).

³⁸ GBENGA ODUNTAN, SOVEREIGNTY AND JURISDICTION IN THE AIRSPACE AND OUTER SPACE: LEGAL CRITERIA FOR SPATIAL DELIMITATION, 31 (2012).

³⁹ Martha Mejia-Kaiser, Space Law and Unauthorized Cyber Activities, in PEACETIME REGIME FOR STATE ACTIVITIES IN CYBERSPACE, 368 (Katharina Ziolkowski eds., 2013); Eric Husby, *Sovereignty and Property Rights in Outer Space*, 3 J. Int'l L. & Prac. 359 (1994).

⁴⁰ Nicaragua case; Corfu Channel case.

⁴¹ *Ibidem*.

⁴² Clarifications, §5.

⁴³ *Compromis*, §§14, 15.

2.2. Azasi breached the principle of non-intervention

The customary principle of non-intervention, applicable under Article III of the OST and Article 2 of the MOON, involves the right of every sovereign State to conduct its affairs without outside interference.⁴⁴ It is prohibited to intervene in sovereign matters of another State.⁴⁵ These matters include political, economic, social and cultural systems.⁴⁶

In this case, Suniza historically conducted commercial mining, expanded it to outer space and adopted particular space policy for lunar mining operations.⁴⁷ Azasi entered into an LS Agreement with Suniza to assist in such operations by transporting crew and equipment, however it subsequently refused to fulfill its obligations, which resulted in Suniza inability to continue with its lunar activities.⁴⁸ Azasi subsequently occupied and started using eZ1.⁴⁹

As Azasi caused Suniza's inability to pursue its space policy and conduct its economic activities, it intervened in internal affairs of Suniza. Hence, it breached the principle of non-intervention.

3. Azasi is liable for the occupation and use of eZ1 under general principles of law

Azasi is liable under general principles of law, namely, Azasi violated the prohibition of unjust enrichment (3.1.).

⁴⁴ Nicaragua case; Friendly Relations Declaration.

⁴⁵ Ibidem.

⁴⁶ *Ibidem*.

⁴⁷ Compromis, §1.

⁴⁸ *Ibid.s*, §§1,12, 13.

⁴⁹ *Ibid.*, §§14,15.

3.1. Azasi violated the prohibition of unjust enrichment

In accordance with a general principle of equity, directly applicable as law,⁵⁰ unjust enrichment occurs when one party profits on the expenses of another by using the resources, money and knowhow of the first party.⁵¹ The prohibition of unjust enrichment is a general principle of law⁵² in the sense of Article 38(1)(c) of this Court's Statute.

Azasi occupied and used eZ1, a permanent lunar facility established and fully funded by Suniza.⁵³ Furthermore, Azasi used AI robots, created and powered by Suniza, and the know-how developed by Suniza's personnel it found on a hard drive in eZ1, to mine and incorporate *sefarite* into its commercial products.⁵⁴

Therefore, Azasi profited on the resources, money and know-how invested and developed by Suniza. Thus, Azasi violated the prohibition of unjust enrichment.

_

⁵⁰ Continental Shelf (Tunisia/Libya) (Judgment) 1982 I.C.J. 60 (Feb. 24); Maritime Delimitation and Territorial Questions (Qatar v. Bahrain) (Merits) 2001 I.C.J. 115 (Mar. 16).

⁵¹ Flexi-Van Leasing, Inc. v Iran (US v. Iran) 1986, Iran-US Claims Tribunal Reports [Grotius Cambridge 1988]; Schlegel Corp. v NICIC (US v. Iran) 1984, Iran-US Claims Tribunal Reports [Grotius Cambridge 1988]; CHARLES T. KOTUBY JR., LUKE A. SOBOTA, GENERAL PRINCIPLES OF LAW AND INTERNATIONAL DUE PROCESS, CHAPTER II (E) (2017).

⁵² Case C-259/87 (Greece v. Commission) 1990 ECJ para. 2 ECR I-2845; Case T-126/01 (Vieira and others v. Commission) 2003 ECJ para. 86 ECR II-1209.

⁵³ *Compromis*, §§3,14,15.

⁵⁴ *Ibid.*, §§14,15. *Clarifications*, §§3,20.

B. Azasi is liable for the costs charged by ISpS for the transportation of the crew and tourists from eZ1 to Earth

Azasi is liable for the costs charged by ISpS because the crew and space tourists are protected under space treaties (1.) and Azasi had an obligation to transport them to Earth under international treaty law. In particular, Azasi had an obligation under multilateral space treaties (2.) and the bilateral LS Agreement (3.). Therefore, Azasi must provide reparations for the damage it caused (4.).

1. The crew and space tourists are protected under space treaties

Space treaties use generic terms with regard to the protection of persons, namely, Article V of the OST uses the term *astronaut* and the Rescue and Return Agreement (hereinafter ARRA) uses the term *personnel of a spacecraft*.⁵⁵ According to the *Navigational and Related Rights* case, generic terms evolve over time and must be interpreted accordingly.⁵⁶ The newest space treaty, namely the Agreement Governing the Activities of State on the Moon and Other Celestial Bodies (hereinafter MOON), in its Article 10 uses a broad term *all persons on the Moon* and further declares that any person on the Moon shall be regarded as an astronaut within the meaning of Article V of the OST and as personnel of a spacecraft within the ARRA.⁵⁷ The same interpretation is supported by the doctrine.⁵⁸ Therefore, any person on the Moon is protected under the space law treaties.

⁵⁵ OST, Art. 5, Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched Into Outer Space, *entered into force* Dec. 3, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 [hereinafter ARRA].

⁵⁶ Navigational and Related Rights (Nicaragua v. Costa Rica) 2009 I.C.J. 243 (Jul. 13).

⁵⁷ Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, *entered into force* Jul. 11, 1984, 1363 U.N.T.S. 3 [hereinafter Moon].

⁵⁸ MANFRED LACHS, THE LAW OF OUTER SPACE, 79, 88-89 (1972); Frans G. von der Dunk, *A Sleeping Beauty Awakens: The 1968 Rescue Agreement after Forty Years*, 34 Journal of Space Law 417 (2008); Bin Cheng, *Space Objects, Astronauts & Related Expressions*, 34 Proceedings of the Thirty-Fourth Colloquium on the Law of Outer Space 17, 25 (1991).

2. Azasi had an obligation to transport the crew and the tourists to Earth under multilateral space treaties

Azasi had an obligation to transport the crew and the tourists under the OST and under the ARRA. By not transporting them, Azasi violated Article V of the OST (2.1.) and Article 4 of the ARRA (2.2.).

2.1. Azasi violated Article V of the OST

Pursuant to Article V of the OST, States must render all possible assistance to the astronauts of another State when carrying out activities in outer space. This Article must be interpreted with regard to the law of the high seas, an area beyond national jurisdiction, where ship captains are required to give all necessary assistance to mariners lost or in danger of being lost at sea.⁵⁹ Azasi recalled its crew working on eZ1 and terminated all support to Suniza's eZ1, leaving Suniza unable to further provide support for its crew on the Moon. 60 Not only did Azasi not assist persons on the Moon, it even caused Suniza's inability to provide basic support to its people. Therefore Azasi violated Article V of the OST.

2.2. Azasi violated Article 4 of the ARRA

Article 4 of the ARRA provides that if, owing to distress or emergency, the personnel of a spacecraft must be safely and promptly returned to representatives of the launching authority. Distress means a situation of extreme danger, ⁶¹ whilst emergency means a sudden and unexpected situation, requiring immediate action to restore normality. 62

⁵⁹ United Nations Convention on the Law of the Sea, entered into force 16. Nov., 1994, art. 98, 1835 U.N.T.S. 3; Convention for the Unification of Certain Rules of Law Respecting Assistance and Salvage at Sea, entered into force 23. Sep., 1910, Art. 11, 576 U.T.S. 37; Stephen Gorove, International Protection of Astronauts and Space Objects, 20 DePaul Law Review, 616 (1971).

⁶⁰ *Compromis*, §§12,13.

⁶¹ Rainbow Warrior case (New Zealand v. France) (1990) XX R.I.A.A. 78.

⁶² BLACK'S LAW DICTIONARY, 508 (9TH ED. 2009).

As Azasi refused to assist Suniza personnel and transport them back to Earth, ⁶³ it violated Article 4 of the ARRA.

3. Azasi had an obligation to transport the crew and the tourists to Earth under bilateral LS Agreement

The customary principle *pacta sunt servanda*, affirmed in the *Nuclear Tests* and the *Chorzow factory* cases and crystallized in Article 26 of the Vienna Convention on the Law of Treaties (hereinafter VCLT), establishes the binding nature of treaties and demands that they are performed in good faith.⁶⁴ Azasi freely entered into an LS Agreement with Suniza, legally obliging itself to provide services necessary for Suniza's lunar mining activities.⁶⁵ Those included transportation services from Moon to Earth for Suniza personnel.⁶⁶ The LS Agreement was formulated in accordance with the VCLT.⁶⁷ However, Azasi recalled its crew working on eZ1, terminated all space missions with Suniza and announced it would no longer provide support to eZ1.⁶⁸ Furthermore, Azasi refused to transport Suniza crew and personnel back to Earth.⁶⁹ Therefore Azasi failed to comply with its obligations under the LS Agreement and breached the customary principle of pacta sunt servanda.

-

⁶³ Discussed infra, Section I(C)(2)(2.1.).

⁶⁴ Nuclear Tests; *Pacta Sunt Servanda*, 53 Am. J. Int'l L. 783 (1959); Case Concerning the Factory at Chorzów (Germany v. Poland), 1928 P.C.I.J. (Ser. A) No. 17, 29 (Sept. 13); Reparations for Injuries Suffered in the Service of the United Nations, Advisory Opinion, ICJ Reports 1949, 174; VCLT, Article 26.

⁶⁵ Compromis, §1.

⁶⁶ Ibidem.

⁶⁷ Clarifications, §36.

⁶⁸ *Compromis*, §12.

⁶⁹ *Ibid.* §13.

4. Azasi must provide reparations for the damage it caused

The injuring State must provide reparations for the damage it caused with its internationally wrongful acts.⁷⁰ The injuring State must re-establish the situation that existed before the wrongful act occurred if causality is established.⁷¹ This Court decided in the *Genocide* case that such causality is established if had the act not occurred the damage would not have occurred.⁷²

Because Azasi breached its obligations under the OST⁷³ and under the ARRA⁷⁴ as well as under the LS Agreement⁷⁵, Suniza was forced to engage an alternative transporter, which however charged three times the customary price.⁷⁶

The higher price was therefore a direct consequence of Azasi's internationally wrongful act. Hence, causality is established and Azasi must repair the damage it caused.

_

⁷⁰ Case Concerning the Factory at Chorzów (Germany v. Poland), 1928 P.C.I.J. (Ser. A) No. 17, 34 (Sept. 13).

⁷¹ Genocide Case (Bosnia and Herzegovina v. Serbia and Montenegro) 2007 I.C.J. 233-234 (Feb. 26); Ilias Plakokefas, *Causation in the Law of State Responsibility and the Problem of Overdetermination: In Search of Clarity*, 26 EUR. J. INT. LAW, 471-492 (2015).

 $^{^{72}}$ Ibidem.

⁷³ Discussed infra, Section I(B)(2)(2.1.).

⁷⁴ Discussed infra, Section I(B)(2)(2.2.).

⁷⁵ Discussed infra, Section I(B)(3).

⁷⁶ Compromis, §13, Clarifications, §13.

II. SUNIZA IS NOT LIABLE FOR DAMAGES FOR THE LOSS OF AZASI 7 AND LAUNCH PAD

Suniza is not liable for damages for the loss of Azasi 7 and launch pad under treaty law (A.) or under customary international law of State Responsibility (B.).

A. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under treaty law

Suniza is not liable for damages for the loss of Azasi 7 and launch pad under treaty law. Firstly, it is not liable under the LIAB (1.) and secondly, it is not liable under the OST (2.).

1. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under the LIAB

LIAB, as *lex specialis*,⁷⁷ is the source for determining liability for damage caused by a space object of one launching State to a space object of another launching State. In its Article III, it establishes fault-based liability for damage caused in outer space.⁷⁸ Suniza is not liable under Article III of the LIAB, as the prerequisites for Suniza's liability are not met. *Firstly, sefarite* is not a space object (1.1.). *Secondly*, there is no causal link between the infused *sefarite* and the subsequent explosion (1.2.) *Lastly*, Suniza is not at fault (1.3.).

1.1. Sefarite is not a space object

Sefarite is not a space object under treaty law, in particular, under the definition of space object in Article I(d) of the LIAB (1.1.1.) or under Article II of the REG (1.1.2.). Furthermore, it is not a space object under the customary rules of interpretation (1.1.3.).

⁷⁸ Convention on International Liability for Damage Caused by Space Objects, *entered into force* Oct. 9, art. 3, 1973, 24 U.S.T. 2389, 961 U.N.T.S. 187 [hereinafter LIAB].

⁷⁷ MANFRED LACHS, THE LAW OF OUTER SPACE; AN EXPERIENCE ON CONTEMPORARY LAW-MAKING, 114 (2010).

1.1.1. Sefarite is not a space object under the definition of a space object in Article I(d) of the LIAB

Article I(d) of the LIAB determines that the term space object includes all component parts of a space object as well as its launch vehicle and parts thereof. Cargo is not included in this definition.⁷⁹

In the case at hand, *sefarite* is a lunar rock and it is as such cargo, transported by the spacecraft Azasi 7.80 Therefore, sefarite is neither a component part of Azasi 7, nor its launch vehicle and hence it is not a space object under Article 1(d) of the LIAB.

1.1.2. Sefarite is not a space object under Article II of the REG

Article II of the REG demands that a space object is registered in State registry by its launching State. 81 Infused sefarite, however, was not registered under the REG. 82 It therefore follows that infused sefarite is not a space object under the REG.

1.1.3. *Sefarite* is not a space object under the customary rules of interpretation

Pursuant to Articles 31 and 32 of the VCLT, which codify existing custom, treaties are to be interpreted according to the ordinary meaning of the terms used and the drafting history of the treaty. 83 While drafting the LIAB, the definitions proposed stated that a space object for the

⁷⁹ BLACK'S LAW DICTIONARY, 508 (9TH ED. 2009).

⁸⁰ *Compromis*, §§5,9.

⁸¹Convention on Registration of Objects Launched into Outer Space, *entered into force* Sept. 15, 1976, art. 2, 28 U.S.T. 695, 1023 U.N.T.S. 15. [hereinafter REG]; MANFRED LACHS, THE LAW OF OUTER SPACE; AN EXPERIENCE ON CONTEMPORARY LAW-MAKING, 66,67 (2010).

⁸² Clarifications, §31.

⁸³ Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicaragua) (Merits) 2009 I.C.J. 214 (Jul. 13); Kasikili/Sedudu Island (Botswana/Namibia) I.C.J. 1999 1059 (Dec. 13); ANTHONY AUST, MODERN TREATY LAW AND PRACTICE, 243 (2007).

purposes of the LIAB is designed for or capable of self-sustaining movement in outer space.⁸⁴ It is seen that the text of Article III of the LIAB follows these definitions by using the phrase "on board a space object". The Lunar Rover, a battery-powered vehicle capable of moving only on the Moon's surface, and space installations that could not move, are not covered under the LIAB.⁸⁵ Sefarite is a mineral found in certain lunar rocks.⁸⁶ To be transported through outer space, it requires the aid of AI robots or a spacecraft, such as Azasi 7.⁸⁷

As infused *sefarite* is not capable of moving through outer space by itself it therefore follows that it is not a space object under the LIAB.

1.2. There is no causal link between infused sefarite and the explosion of Azasi 7

The LIAB establishes that the damage must be caused by a space object, meaning a sufficiently direct and certain causal nexus must exist between a space object and the injury suffered.⁸⁸ LIAB drafters interpreted the provisions narrowly, requiring a proximate causation between damage and alleged fault, which according to State Practice, is one that normally and foreseeably leads to damage.⁸⁹ The launching stage is the most vulnerable part of space activities and accidents are inevitable as rocket launches are dependant on controlled explosions.⁹⁰ In the present case, Suniza

⁸⁴ U.N. Doc. A/AC 105/C.2/L. 10 Rev. 1. & U.N. Doc. A/AC 105/C.2/L. 2-WG *11/20*; F.G. von der Dunk, *Legal Aspects of private manned spaceflight*, in HANDBOOK OF SPACE LAW 679, (F.G. von der Dunk, F. Tronchetti (eds), 2017).

⁸⁵ Foster, *The Convention On International Liability for Damage Caused by Space Objects*, If 10 Canadian Y. B. Int'l. L., p. 145-6 (1972).

⁸⁶ Compromis, §5.

⁸⁷ *Ibid.*, §§5,10.

⁸⁸ LIAB, Article 3; H.L.A. HART & A.M. HONORE, CAUSATION IN THE LAW, 104-108, 116-119 (1985); Bernhard Schmidt-Tedd, *Article II*, II COLOGNE COMMENTARY ON SPACE LAW, 126 (Stephan Hobe, Bernhard Schmidt-Tedd & Kai-Uwe Schrogl eds. 2013).

⁸⁹ Angola Cases (Portugal v. Germany) 1928/1930, 2 R.I.A.A. 1011; Life Insurance Claims (Germany v. United States of America) 1924, 4 R.I.A.A. 121.

⁹⁰ FRANS VON DER DUNK & FABIO TRONCHETTI, HANDBOOK OF SPACE LAW, 383 (2017); V. KAYSER, LAUNCHING SPACE OBJECTS: ISSUES OF LIABILITY AND FUTURE PROSPECTS, 3 (2001); CHRISTIAN BRUNNER & ALEXANDER SOUCEK, OUTER SPACE IN SOCIETY, POLITICS AND LAW, 342 (2012); U.N. Documents. A/AC.105/850; A/AC.105.C2/SR.03.

researched the infused sefarite, that is, according to testing, as safe as the uninfused one, and which has already been transported successfully to Earth several times.⁹¹ The explosion of Azasi 7 occurred during the launching phase. 92 Suniza, however, was not aware of any risk of explosion due to the presence or handling of the infused *sefarite* on board and even Azasi's visual inspection of the cargo before take-off detected no harmful aspects. 93

Therefore, Suniza could not have expected, foreseeably and normally, that sefarite could cause an explosion and causality is not established.

⁹¹ *Compromis*, §§6,7,9,14. 92 *Ibid.*, §10.

⁹³ *Ibidem.*; Clarifications, §21.

1.3. Suniza's fault is not established

Fault lies in the violation of a legal duty imposed on a State, done intentionally or with negligence. He standard of care. He standard of care. He standard of care. The LIAB does not set a standard of care. The LIAB does not set a standard of care. The standard is dependent on the practice of those involved in outer space missions and on provisions of space treaties. Under the latter, States are required to share knowledge and promote international cooperation and understanding. In the case at hand, Suniza researched *sefarite* and even made *sefarite* available to Azasi and other States for scientific study. Suniza was not aware of any risk related to infused *sefarite* on board and has furthermore ascertained that the enhanced *sefarite* was as stable as the unenhanced ore. Consequently, it informed Azasi of the *sefarite* cargo. Suniza's actions therefore fulfill the required standard of care in sharing knowledge and promoting international cooperation and understanding. Hence, Suniza's fault is not established.

2. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under the OST

Suniza is not liable for damages for the loss of Azasi 7 and launch pad under Article VI of the OST (2.1.). Moreover, it is not liable under Article VII of the OST (2.2.).

⁹⁴ BIN CHENG, GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS, 225 (1953); Corfu Channel case, Dr. Ečer & Judge Krylov dissenting opinions.

⁹⁵ IRMGARD MARBOE, SOFT LAW IN OUTER SPACE, 125-135 (2012); VCLT, Art.31.

⁹⁶ Carl Q. Christol, International Liability for Damage Caused by Space Objects, 74(2) AM. J. INT. LAW, 368 (1980).

⁹⁷ Martha Mejía-Kaiser, *ESA's choice of futures: Envisat removal or first liability case*, 55 PROC. 55TH COLLOQUIUM ON THE LAW OF OUTER SPACE, 10 (2012).

⁹⁸ Art. 9,11 OST; Art. 2,4,5 MOON.

⁹⁹ *Compromis*, §6.

¹⁰⁰ *Ibid.*, §§10,14; Clarifications, §21.

¹⁰¹ *Ibid.*, §10.

2.1. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under Article VI of the OST

States must assure that national activities, carried out by governmental as well as non-governmental agencies in outer space, are carried out in conformity with the provisions of the OST. ¹⁰² Infusion of *sefarite* was handled by ACS, a private Suniza contractor and SDD, Suniza Defence Department. ¹⁰³ However, their actions were in conformity with the OST. ¹⁰⁴ Therefore Suniza is not liable for the loss of Azasi 7 and launch pad under Article VI of the OST.

2.2. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under Article VII of the OST

Article VII of the OST declares that the State that launches or procures the launching of an object into outer space is internationally liable for damage caused by such an object. Causality must therefore be established between the damage and the object launched. As there is no causal link between the infused *sefarite* and the explosion of Azasi 7 and its launch pad, ¹⁰⁵ Suniza is not liable for such damage under Article VII of the OST.

¹⁰² OST, Art. 6.

¹⁰³ *Compromis*, §§4,5,6,7.

 $^{^{104}}$ Discussed infra, Section II(A)(1)(1.3.), Discussed infra, Section II(A)(1)(1.2.).

¹⁰⁵ Discussed infra, Section II(A)(1)(1.2.).

B. Suniza is not liable for damages for the loss of Azasi 7 and launch pad under customary international law of State Responsibility

Customary international law, enshrined in Article 2 of the ARSIWA, declares that States are only responsible for internationally wrongful acts if two conditions are fulfilled cumulatively, *firstly* that such acts are attributable to the State and *secondly* that they represent a breach of an international obligation. However, actions attributable to Suniza are permitted under international treaty law (1.) and under customary international law (2.) and therefore Suniza is not liable for damages for the loss of Azasi 7 and its launch pad.

1. The actions attributable to Suniza are permitted under international treaty law

The actions are permitted under Article I of the OST (1.1.) and Article IX of the OST (1.2.).

1.1. The actions are permitted under Article I of the OST

Article I(3) of the OST proclaims that there shall be freedom of scientific research in outer space, including on the Moon. Scientific research is a broad term, which is not necessarily specified by criteria. ¹⁰⁶

Suniza embarked on a program which included space exploration and research activities. Suniza's research and development efforts et eZ1 uncovered *sefarite* could be used as a bonding and hardening material for plastics and steel materials and furthermore found that these properties are increased if oxygen is added.¹⁰⁷ As Suniza was throughout the time conducting scientific research with regard to *sefarite*, such actions are permitted under Article I of the OST.

_

¹⁰⁶ Whaling in the Antarctic (Australia v. Japan) 2014 I.C.J. 255-257 (Mar. 31).

¹⁰⁷ Compromis, §§1,5,6,7,9.

1.2. The actions are permitted under Article IX of the OST

Article IX of the OST decrees that in the exploration and use of outer space, including the Moon, State shall be guided by the principle of cooperation and shall conduct their activities with due regard to the interests of other States.

Suniza collaborated with Azasi on research and development of space exploration. Suniza furthermore provided samples of *sefarite* to other States, including Azasi, for scientific study. ¹⁰⁸ Therefore, Suniza has always been mindful of other State's interests and has cooperated with other States. In that regard, Suniza complied with Article IX of the OST.

2. The actions attributable to Suniza are permitted under international customary law

Suniza's actions are permitted under the principle of sustainable development (2.1.).

2.1. The actions are permitted under customary principle of sustainable development

States have the right to sustainable development, already recognized by this Court in the cases of *Gabčíkovo-Nagymaros Project* and *Pulp Mills on the River Uruguay*, which must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. ¹⁰⁹ In this case, Suniza was throughout the years conducting extensive space exploration and discovered *sefarite*. It further processed and infused it with oxygen, to improve its commercial value and incorporated it to various products. Suniza's testing proved that infused *sefarite* is safe for use. ¹¹⁰ As the activities connected to *sefarite* were safe and were improving the quality of

¹⁰⁸ *Compromis*, §§1,2,6.

¹⁰⁹ Principle 3 of the Rio Declaration on Environment and Development, Rio de Janeiro, 3-14 June 1992, UN Doc. A/CONF.151/26 (Vol.I); Gabčíkovo-Nagymaros case; Pulp Mills on the River Uruguay (Argentina v. Uruguay) 2010 I.C.J. 56 (Apr. 20).

¹¹⁰ *Compromis*, §§1,3,5,7,9,14.

materials already known to humans, those activities are in compliance with the principle of sustainable development.

SUBMISSIONS TO THE COURT

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

- 1. Azasi is liable for the occupation and use of eZ1 contrary to international law and for the costs charged by ISpS for the transportation of the crew and tourists from eZ1 to Earth.
- 2. Suniza is not liable for damages for the loss of Azasi 7 and launch pad.

Respectfully submitted,

AGENTS FOR THE APPLICANT