INTERNATIONAL JOURNAL ON SPACE LAW AND POLICY

VOLUME 2 AND ISSUE 1 OF 2024

INSTITUTE OF LEGAL EDUCATION

INTERNATIONAL JOURNAL ON SPACE LAW AND POLICY

APIS – 3920 - 0014 & ISSN - 2584-1955

(Open Access Publication)

Journal's Home Page – https://ijslp.iledu.in/

Journal's Editorial Page - https://ijslp.iledu.in/editorial-board/

Volume 2 and Issue 1 (Access Full Issue on - https://ijslp.iledu.in/category/volume-2-and-issue-1-of-2024/)

Publisher

Prasanna S,

Chairman of Institute of Legal Education (Established by I.L.E. Educational Trust)

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INTERNATIONAL JOURNAL OF SPACE LAW AND POLICY
VOLUME 2 AND ISSUE 1 OF 2024
APIS – 3920 - 0014 *(and)* ISSN - 2584-1955 [IF SCORE – 7.58]

Published by
Institute of Legal Education
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THE COSMIC CONTRACT: EXPLORING THE LEGAL EQUILIBRIUM BETWEEN PRIVATIZATION AND ASTRONAUTS' RIGHTS

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BEST CITATION – SHREYASREE PAUL, THE COSMIC CONTRACT: EXPLORING THE LEGAL EQUILIBRIUM BETWEEN PRIVATIZATION AND ASTRONAUTS' RIGHTS, *INTERNATIONAL JOURNAL OF SPACE LAW AND POLICY,* 2 (1) OF 2024, PG. 71-79, APIS – 3920 - 0014 & ISSN - 2584-1955.

ABSTRACT

With the advent of steadfast aeronautical commercialization, the torchbearers of this revolution being private entities like Virgin Galactic, Space X, Blue Origin, etc., novel contemporary issues in the field of International Space Law have spiked up with respect to the rights and protections of astronauts. Otherwise, undefined in the 1967 Treaty of on Principles Governing the Activities of States in the exploration and Use of Outer Space (*hereinafter, "Outer Space Treaty*), astronauts have been deemed to be the "envoys of humankind" who bear a lot of responsibilities, both in legal and commercial terms. This research probes into the complex interplay between the two, pivoting on the legal hemisphere.

Moreso, this academic attempt aims to understand the adequacy of the existing laws with regards to the various factors involved in ensuring the rights of astronauts employed by private players, such as their safety, healthcare, informed consent, compensation, jurisdiction, dispute resolution mechanism, protection against exploitation, etc. It also delves into the ethical deliberations involving the interests of astronauts in private profit-centric endeavours, whether the welfare of the former gets sidelined or not in the present era of commercialisation and space tourism.

This research paper thoroughly analyses international treaties, domestic laws, prevalent industrial norms with respect to said subject-matter, and other prime practises. It also puts forth suggestions and recommendations to ensure increased protection of the interests of astronauts, both in terms of human rights and professionalism ethics, as we step into this new era of space privatization. The core objective of this paper is to strike a harmony between commercial pursuits and the trailblazing astronauts who make these attempts a success.

Keywords: *Astronauts' Rights, Commercialisation, International Space Law, Privatisation.*

INTRODUCTION

International space expeditions and their ancillary extensions, in both research and development, have braved through a renaissance, especially in the present century. Of late, there is an influx of the scientific wonders humankind has achieved. Strictly speaking from the events of 2024, for instance, we had SpaceX's Starship IFT-3 cut out for interplanetary endeavours, focusing on how to transfer fuel from one spacecraft to another while still working on the orbits of these heavenly bodies such as Moon and Mars. Such technology has been named "in-orbit propellant transfer" with an approximate contract value of $54 million dollars.[155] Secondly, NASA's latest endeavour revolves around the target to help man achieve farther distances beyond the reigns of Moon with its Artemis-II.[156] It also aims to land the first woman on moon, Christina Koch, as part of its follow up mission in 2025. Further in news, we have Blue Origin's New

[155] Passant Rabie, *SpaceX to Attempt Daring Orbital Refueling Test of Starship*, GIZMODO (Nov. 25, 2024, 02:37 AM) https://gizmodo.com/.
[156] NASA, https://www.nasa.gov/mission/artemis-ii/ (last visited Nov. 30, 2024).

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Glenn all set to pave the path for commercial space ventures as part of its mission to study the magnetosphere of Mars.[157] Not to forget India's ISRO celebrating the one-year anniversary of the successful Chandrayaan-3 which was the first of its kind to soft land on the south pole of the Moon.

It is worth noting that 50% of these above stated endeavours are buttressed by private companies who are the soaring pioneers competing against its government-led counterparts. The most celebrated trailblazers being Virgin Galactic, SpaceX and Blue Origin amongst the many names. This gives proof to the fact that we are witnessing a progressive shift from authoritarian missions to privatized action, fundamentally reimagining humanity's approach to cosmic exploration and commercialisation. Such a seismic shift brings us to the question – are we ready for the next big step? Are our existing laws enough to address the evolving legal and ethical challenges that demand stringent pedagogical attention?

At the heart of this revolution, the prime concern that arises with commercialisation is if the biggest backbone of the industry is well-kept. The human element or more distinctly, the astronauts who are frontrunners serving as scientific and commercial assets in the ever-evolving space sector. Defined as the "envoys of humankind" under the Outer Space Treaty of 1967,[158] it demands yet another question – amidst the increasing era of commercialisation and profit-making imperatives, are we able to strike a balance between the aggressive commercial pursuits and the fundamental rights and protections of astronauts?

Through this academic endeavour, the author has aimed at delving into the complex legal landscape which addresses these questions at the intersection of privatization and human rights. By critically analysing international treaties, domestic regulations, and industrial practices, the study seeks to address crucial questions surrounding astronaut protection, including safety, healthcare, informed consent, compensation, and jurisdictional challenges in extraterrestrial contexts. As space tourism and commercial missions proliferate, there is an urgent need to establish comprehensive legal standards that balance human rights with technological innovation and commercial potential.

HISTORICAL CONTEXT: THE LEGAL TAPESTRY OF "COSMIC CONTRACTS"

The story of human space exploration is a tale of legal and technological and ethical complexity, a story that has branched out from watching two superpowers compete for spectacular feats to a realm of human activity that has become a multiplicity. They were big, ambitious missions that enlivened the world's imagination, as U.S. government agencies like NASA and the former Soviet Union agency, Roscosmos, competed in the mid-20th century space race, which became a theatre of ideological supremacy. The 1967 Outer Space Treaty became a key document from those years — a set of basic principles for governing human behaviour outside the atmosphere of the Earth.

This treaty created a legally binding framework, centered on the idea that space is a global common; that no one nation could claim celestial bodies as its own and that space exploration would be for the benefit of all mankind. But the treaty was essentially built for a world of government agency monopolies, and as such, it left serious legal loopholes for the nascent commercial space sector.[159]

We have gone from government controlled to privatized space exploration, a game changer in space travel. Private-sector players make up a new and innovative marketplace of space, no longer an exclusive domain of government, like

[157] BLUE ORIGIN, https://www.blueorigin.com/new-glenn (last visited Nov. 30, 2024).
[158] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies ("Outer Space Treaty"), Article 5(1), 1967 (United Nations).
[159] Art Dula, *Private Sector Activities in Outer Space*, vol. 19:1 THE INTERNATIONAL LAWYER 159, 161 (1985).

SpaceX, Blue Origin and Virgin Galactic. This transformation has been fuelled by the same forces behind many of the planet's disruptive changes: technology that has become cheaper and more powerful; launch costs that have come down, making access to space more like creating a new business than taking an exploratory mission; and a new, entrepreneurial sensibility to space that treats it as not just a frontier of scientific exploration, but as a new economic ecosystem.

But this commercialization has also revealed important legal and ethical fault lines. The current international legal framework fails miserably to take into account the complex rights and protections of astronauts working in a profit-focused environment. The original space treaties focused on teamwork and scientific advancement in exploring outer space but could not have foreseen that private companies would have made inroads into commercial space tourism, satellite networks and exploitation of alien resources.

The legal ones are complex and multifaceted. This can become even more complex jurisdictionally when we consider the possibility of resolving disputes involving incidents beyond the space beyond the reach of the courts. Why is the legal framework different if an accident happens during a commercial space mission? To what extent are their rights as astronauts protected when they are employees of private corporations that might have conflicting interests between the two objectives of safety and commercial success? Questions like these highlight the pressing case for a universal "Cosmic Contract" to align commercial interests with humanistic values.

In addition, the notion of informed consent has new meanings when it comes to commercial space exploration. The ESA's experiences reflect the continued evolution of the astronaut corps away from pure government-selected science professionals toward contributors from the private sector and even prospective space tourists. The risks are different by orders of magnitude — from microgravity physiological must-haves to potential long-term effects on health and psychological stressors of space travel.

This new landscape requires a complex legal infrastructure that can keep up with the pace of fast changing technology. This is achieved through global cooperation to identify and establish adaptive structures that defend astronaut rights, guarantee safety standards, clarify liability systems, and enact ethical measures for space development that balance the Wellbeing of individuals in light of industry innovations.

RIGHTS OF ASTRONAUTS: WHETHER ADEQUATELY ADDRESSED OR NOT?

In this ever-evolving cosmic landscape, "astronauts' rights" have been highly controversial. It transcends beyond our traditional comprehension of standard industrial and labour practises due to its niche and complex nature.

As mentioned earlier, the term "astronaut" has been defined in the Outer Space Treaty, 1967[160] on a generalised descriptive basis rather than legalised technical one by addressing them as "envoys of mankind." Most of the laws in relation to astronauts are based on the general international law which adopts a jurisdictional approach. It states that astronauts are subjected to the jurisdiction of the territorial State of Registry, inclusive of quasi-territorial jurisdictions of a State over a space object which is again subject to exceptions.[161] principles of law are more adept in addressing the situations of emergencies arising during space missions, explicitly mentioned in the Rescue Agreement.[162]

[160] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies ("Outer Space Treaty"), 1967 (United Nations).
[161] BIN CHENG, STUDIES IN INTERNATIONAL SPACE LAW 457-461 (Clarendon Press Oxford, 2004).
[162] Agreement on Rescue of Astronauts, The Return of Astronauts and the Return of Objects Launched into Outer Space, ("Rescue Agreement"), 1968 (United Nations).

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Article VI of the Outer Space Treaty[163], while groundbreaking for its time, reveals significant limitations in defining astronauts' rights within the contemporary commercial space exploration landscape. The article primarily places international responsibility on states for national space activities, including those undertaken by non-governmental entities, but fails to provide granular mechanisms for protecting individual astronaut rights in a privatized ecosystem. In the era of commercialization, this broad mandate becomes increasingly inadequate, as it does not explicitly address the nuanced employment, safety, and ethical considerations unique to private space ventures. The provision lacks specificity regarding astronaut welfare, informed consent protocols, comprehensive medical protections, and dispute resolution mechanisms that are critical when commercial entities, driven by profit motives, are primary space exploration actors.

Moreover, the treaty's language of "national responsibility" becomes increasingly complex when multinational crews, privately owned spacecraft, and international commercial partnerships blur traditional jurisdictional boundaries. The article's framework was conceived during a government-controlled space exploration paradigm and consequently fails to anticipate the complex legal and ethical challenges posed by corporate space tourism, private mission structures, and the potential commodification of human space exploration. This legislative gap creates a critical need for a more sophisticated, adaptive legal framework that can comprehensively define and protect astronaut rights in an era where space is increasingly viewed as a commercial frontier rather than solely a realm of scientific discovery and national prestige.

Article VIII of the Outer Space Treaty[164] states "State Party…shall retain jurisdiction and control over such object, and over any personnel thereof…" On interpretation, we can see that personnel includes all persons inside and outside of the spacecraft, which clearly includes astronauts. Whether these personnel are invited or not is completely separate debate due to the inadequate legalese contained the provision. However, it includes all those who are engaged in extraterrestrial missions or terrestrial missions, provided that they are connected to the spacecraft in some way or the other.

Merely being defined on humanitarian grounds as the "envoys of mankind" does not serve the purpose adequately. General principles of international law, Moon Treaty, Rescue Agreement and the Outer Space Treaty are more adept in addressing the situations of emergencies arising out of space missions, such as an accident, vehicle failure or immediate return to earth. Therefore, providing astronauts more of an emergency right where they are able to demand international interference, we can see that there is a clear and undisputed lacunae in the legal sphere where it fails to address any other form of rights, especially in light of the dynamic and demanding nature of space explorations. Even when it strived to define them on jurisdictional basis, there are many loopholes. Not to forget that under the meaning of "personnel," the passengers and individuals from other spacecrafts are also defined in a very scanty manner.[165]

Other factors which contribute towards its complexities are that it surpasses domestic laws in most cases and relies on the international context, as well as draws consonance from human rights in the very unprecedented field of space exploration and research. Ideally speaking, astronauts' rights should adopt a multi-faceted framework which

[163] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies ("Outer Space Treaty"), Article 6, 1967 (United Nations).

[164] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies ("Outer Space Treaty"), Article 8, 1967 (United Nations).

[165] Gibson, Jane and Jeremy Powell, *Current Space Law And Policy*, AU-18 SPACE PRIMER AIR UNIVERSITY PRESS 43, 43 (2009).

addresses the psychological, physical, professional variants of an astronaut's welfare. Physical welfare also should encompass the medical protection and support, especially in times of a risk-based centric missions. It should also address the measures to be undertaken in a situation when space missions do not go as planned, exposing these "envoys of mankind" to risky cosmic anomalies which might go beyond human understanding due to its extraterrestrial nature.

COMMERCIAL COSMIC CONTRACTS AND ASTRONAUTS' RIGHTS: IS THERE A BALANCE?

When we talk about the same in the era of commercialisation, it becomes a greater point of discussion due to the prime profit-making ideals. For multifaceted matters like rights of astronauts working for these private giants, the necessity for a well-defined and multifaceted contract becomes quintessential, making it an exponentially sophisticated legal instrument designed to codify such matters. Commercial space exploration brings in multiple interested stakeholders with potentially conflicting interests. These stakeholders are private corporations, national regulatory bodies, international space agencies, and, of course, the astronauts. At the same time, it should fulfil its purposes by being adaptive and developing adequate mitigation strategies vis-à-vis those dynamic factors involved in space exploration without losing sight of the human-centered nature of the issue. Balancing commercial interests, on the one hand, and astronauts' rights, on the other, is quite laborious. As was discussed earlier, there exist emergency provisions in international law. Establishing clear and undisputed reasons and evacuation procedures for mission abortion would then arise. Needless to say, that such contracts in outer space are also supposed to have provisions of insurance and compensation for injuries and damages to astronauts happening during the space mission.

For the efficacy of this paper, a case study on the NASA's Astronauts Code of Conduct[166] can be done to understand matters in a more succinct yet comprehensive manner. Many space sector giants refer to this code for the maintenance and understanding of their own professional and ethical standards. It provides various end-to-end details about the know-hows of an astronaut's code of conduct, working in the NASA space missions. It addresses integrity on three major folds: professional integrity, ethical standards and safety and mission preparedness.

The code is about clear expectations of what constitutes professional conduct. It emphasizes the importance of mission success, teamwork, and representing NASA's mission with the highest integrity. It provides a structural framework conserving both the organizational goals as well as maintenance of individual professional dignity of astronauts. NASA's regulations explicitly set strong ethical standards that raise the bar above regular employment requirements. This code takes account of obvious conflicts of interest, allows strict confidentiality demands, and establishes bright lines between personal and professional behaviour with respect to missions or public representation. The document also contains detailed mission preparation, conduct, and professional readiness protocols. It affirms a commitment to thorough astronautary preparation that goes beyond technical training to psychological and ethical readiness.

However, when we discuss the vantage points, we also need to look into the pitfalls of this code. On a broader perspective, when we talk about astronauts' rights, even such a superpower as NASA does not explicitly define the same. Its provisions are more government-employee centric, leaving no room for decisions undertaken by astronauts and more inclined towards a government-controlled environment. It also talks little to none about protection of

[166] CORNEL LAW SCHOOL, https://www.law.cornell.edu/ (last visited Nov. 30, 2024).

astronauts' personal rights during space missions and even on ground operations such as on matters of psychological support, long-term health effects, dispute resolution, etc. It also lacks a comprehensive framework to address matters incidental to risk mitigation during such arduous missions, some of which even ignore the topic of informed consent mistaking it for being implied. It also fails to address the complex nature of jurisdiction related matters such as cross-border or cross-spacecraft endeavours made during times of emergency.

When we draw inference from NASA's said Code of Conduct, we find it inefficient and obsolete from the stance of privatisation and commercialisation. When thought from a commercial perspective, we find it to be inadept to address the complex nature and challenges that needs to be settled in privatised, profit-forwards space giants. Speaking of which, it has to balance the interests of its stakeholders as well as astronauts, encouraging a holistic nature of mechanism which becomes quite the challenge. As of the current day when I write this article, none of the private space players regard astronauts' rights in a comprehensive manner, depending solely on existing space laws and general international laws.

Hence, a truly effective cosmic contract should be a dynamic and collaborative tool that goes beyond traditional legal limits. It needs international agreement, interdisciplinary knowledge, and a philosophical dedication to seeing space exploration as a shared human effort instead of a commercial or nationalistic goal. Balancing astronauts' rights with this perspective will help establish a successful future in space.

THE EMERGING LEGAL AND ETHICAL CHALLENGES IN THE ERA OF COMMERCIALISATION AND SPACE EXPLORATION

The era of commercial space exploration has unveiled a complex landscape of ethical and legal challenges that fundamentally challenge our existing conceptual frameworks of human rights, corporate responsibility, and extraterrestrial engagement. As private entities like SpaceX, Blue Origin, and Virgin Galactic transition from technological aspirants to serious space exploration corporations, the traditional boundaries between scientific mission, commercial venture, and human exploration become increasingly blurred.

The prime dilemma arises in codifying and accommodate as to what counts as human rights and what does not when we regard them on the same standing point with the complexity of space exploration. When market game comes into the scenario, astronauts risk being transformed from pioneering explorers to mere company assets. This commodification raises critical questions: Can human potential and scientific curiosity be reduced to economic metrics? What happens when profit motives potentially compromise human safety or scientific integrity?

Secondly, the concerns regarding risk allocation and informed consent in commercial space missions come into play. The whole idea of informed consent in commercial space exploration signifies a multi-dimensional legal and ethical knot that surpasses the ambit of conventional employment contracts. Space missions pose extraordinary health and safety threats that are, in a nutshell, unpredictable and frankly life-risking, unlike conventional workplace scenarios. The nature of these threats extends beyond instant physical peril into long-term health, psychological and existential aspects that cannot be entirely conveyed and foreseen via standard consent mechanisms.

At the heart of the challenge lies the paradox between technological ambitions and human vulnerability. The commercial space playing ground provides a complex landscape on which cutting-edge exploration juxtaposes human limitation. The traditional informed consent models flawed for that very reason fall woefully short when faced with the multi-layered

uncertainties in extraterrestrial missions. An astronaut's consent is not only a question of paperwork, but much deeper, an exploration of the philosophical arrangement of individual agency versus the great human quest for discovery.

The physiological risks alone present a staggering array of potential complications. Long exposure to weightlessness can cause irreversible changes in human physiology including loss of bone density, muscle withdrawal, cardiovascular deconditioning, and perhaps the first long-term genetic alterations. These risks cannot be adequately conveyed through standard consent documents. Psychological insults add their own terrific layer of complexity. Human beings in space missions and/or in under-one-g environment become subjected to unprecedented environments of isolation, confinement, and sensory deprivation. Possibilities for psychological trauma and cognitive disturbances, as well as long-term mental health challenges, extend far beyond conventional workplace stress. Informed consent in this context requires not only the medical disclosure but a holistic bearing towards possible existential and neurological transformations.

In analysing the economics behind it, a new dimension arises. Economic power dynamics make this landscape of consent even murkier. Often, the astronauts in a commercial space exploration ecosystem assume a most precarious position, likely constrained by professional ambition or economic necessity to jeopardize genuine voluntariness. The line between genuine choice and covert coercion becomes at times beautifully blurred. A junior scientist or engineer may feel compelled to accept risky missions out of career motivation, even though they may be fully aware of the potential and accurately life-altering consequences.

International regulatory bodies must collaboratively develop standards that prioritize human dignity over commercial expediency. It will necessitate a complete paradigm shift from equating consent to mean a legal formalism, where consent becomes a living and interactive dialogue between potential of humans and technological frontier.[167] The final ethical consideration to acknowledge is that informed consent in commercial space exploration is not about eliminating risk but formulating transparent, dignified platforms based on mutual respect of human agency. Each mission evolves into a deeply profound negotiation aligned to individual choice up against human progress in general.

Thirdly, as discussed earlier in the light of astronauts' rights, the concerns pertaining to jurisdictional complexities come to the forefront in light of astronauts' rights. Traditional terrestrial legal paradigms are not adept in facing up to the multifaceted reality of extraterrestrial human activity. Thus, in contrast to the maritime or aviation codes, which already have worked up well-synched international accords, space law remains a fragmented and poorly developed legal field. The underlying conundrum then arises: Under which jurisdiction do incidents occurring in space, on-board spacecraft, or during missions fall? Is it under the nationality of the spacecraft, the country of type of the commercial entity, the nationality of the astronauts, or some wholly new legal construct?

ALTERNATIVE DISPUTE RESOLUTION: AN EFFECTIVE SOLUTION

While we discuss about existing lacunae in the subject matter of striking a balance between commercial cosmic contracts and astronauts' rights, it is only fair to also brainstorm solutions for the same. Pertaining to the contractual nature of the subject-matter, a great solution can be derived from the existing legal solutions widely practised across the world - Alternate Dispute Resolution (hereinafter, also abbreviated as "ADR"). It emerges as a sophisticated framework capable of addressing

[167] Dr. Sandeepa Bhat B., Space Law In The Era of Commercialisation 145 (Eastern Book Company, 2010).

the unique complexities inherent in the subject matter of cosmic contracts, offering a nuanced approach to balancing commercial interests with astronaut rights.

The whole rationale of ADR rests in its ability to set up specialized flexible protocols of resolution that concerned the multidimensional nature of space exploration. Unlike formal judicial systems, ADR can constitute an interdisciplinary panel that is competent enough to tackle the physiological, psychological, and technological challenges specific to space missions. Such panels can involve specialists from space law, aerospace medicine, engineering, human rights, and international relations, enabling a well-rounded and context-honoured method of resolving conflicts.

The flexible procedure is a major advantage for ADR in the realm of cosmic contracts. The failings of orthodox litigation to address space exploration challenges can lend strongly to the outcomes in the context of ADR. Such resolution mechanisms would develop custom resolution protocols apt for resolving the unique challenges of each mission. Such resolution methods would consequently lead to shorter resolution timelines, introduce confidentiality proceedings, and possibly implement remedial strategies in a manner that focuses on long-term human welfare over short-term victory in court cases.

The procedure affords benefits beyond simple monetary compensation; this represents an all-encompassing approach to astronaut welfare. It comprises pre-emptive risk assessment, continued medical and psychological support, aggressive monitoring, and support for re-entry into the job market. Thus, the dispute resolution mechanism is transposed from being retributive in character to one coiling itself around problem-solving, allowing for both technological ambitions of commercial space entities and the fundamental dignity of human explorers.

A defining philosophical cornerstone of ADR is therefore its basis of international cooperation in web-scale space colonization. These mechanisms can foster universal standards for astronaut protection, an understanding of the legality that transcends jurisdictions, and ethical guidelines that go beyond national borders by providing platforms for multinational cooperation. The aim is not just to manage disputes but to create a forward-thinking legal foundation that sustains humanity's shared dreams for the cosmos.

The psychological and professional sides of ADR are especially important. In addition to monetary recompense, such mechanisms may be able to offer comprehensive rehabilitative assistance, protect professional reputations and ensure astro-wellness for years to come. This approach understands space explorers are not wastable resources but rare and pioneering iterations of human potential.

Implementation of effective ADR requires a comprehensive strategy. This includes developing specialized institutions focused on space exploration disputes, creating international certification programs for dispute resolution experts, designing flexible mission-specific contract templates, and establishing robust monitoring mechanisms. The ultimate objective is to transform cosmic contracts from restrictive legal documents into dynamic frameworks of collaborative exploration.

Alternate Dispute Resolution represents more than a legal mechanism—it is a philosophical approach to managing human potential in extraordinary environments. By prioritizing dialogue, expertise, and human dignity, ADR can bridge the gap between commercial ambitions and fundamental human rights. As humanity stands on the threshold of becoming a multi-planetary species, these innovative legal frameworks will play a crucial role in shaping our collective cosmic future.

CONCLUSION

At the base of this academic endeavour, we understand that space exploration has been reshaped from a government-driven enterprise

into an active commercial ecosystem. This development requires a sweeping re-examination of the legal and ethical systems that will regulate astronauts' rights. The existing international legal framework — primarily the 1967 Outer Space Treaty — is insufficient to meet the intricate challenges of private space ventures and leave astronauts potentially open to exploitation and inadequate protection.

This critical gap can only be addressed through a multifaceted approach. This encompasses crafting a comprehensive "Cosmic Contract" focused on respecting human dignity while pursuing quickly changing technological innovations, designing adaptable international standards that can grow with the evolving landscape of space technologies, and facilitating new dispute resolution methodologies such as Alternative Dispute Resolution (ADR). For this, I believe interest must pass over old jurisdictional lines and develop interdisciplinary frameworks that can work to address the physiological, psychological, and professional triggers of space exploration without sacrificing commercial interests nor fundamental human rights.

As humanity teeters on the threshold of becoming a multi-planetary species, the legal and ethical framework we lay today will have a huge impact on our cosmic future. It is all fine and dandy to create regulations, but the challenge is to develop these regulations with a collaborative, human-centered mindset of shared experience and recognizing astronauts as true pioneers who discover unknown territories upon which civilizations may reside in the future and not as disposable resources. We must ensure that our expansion into the cosmos reflects the highest ideals of human potential, scientific curiosity, and collective progress by prioritizing transparent consent, comprehensive protection, and mutual respect.