

# DEVELOPING PRINCIPLES OF CORPORATE HUMAN RIGHTS DUE DILIGENCE FOR OUTER SPACE USE AND EXPLORATION: A CRITICAL EVALUATION

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## Abstract

Corporations are predicted to dominate outer space use and exploration for the foreseeable future. With tentative plans in development for humans to live and work permanently on celestial bodies, what responsibilities will corporations have to observe human rights? It is thought that reform of outer space law is needed to embrace non-state actors to not only delineate their precise legal status but also their rights and responsibilities in outer space. Not only would this pronouncement of rights and responsibilities provide transparency and certainty for corporations, but also for ‘humankind’ as business enterprises such as SpaceX, Blue Origin and the Sierra Nevada Corporation endeavour to make the first leap to establish human communities on celestial bodies. This article will consider the extent to which corporations will need to embed human rights due diligence in their activities on celestial bodies and what measures they will need to adopt to assess, mitigate and remediate human rights violations.

**Keywords:** Commercial Responsibility – Corporation – Due Diligence – Human Rights – Outer Space – UN Guiding Principles

## Introduction

Several business enterprises, including Blue Origin, SpaceX, and the Sierra Nevada Corporation, have announced ambitious plans for humans to live and work on celestial bodies by the end of the 21<sup>st</sup> century. However, concerns are growing about how corporations will exercise human rights due diligence in these communities. Clause 11 of SpaceX’s Terms of Service Agreement, which affirms ‘Mars as a free planet and that no Earth-based government has authority or sovereignty over Martian activities,’ amplifies these concerns. While some experts suggest that the clause supports the non-appropriation principle under Article II of the Outer Space Treaty, it could also authorise human rights breaches, particularly torture, arbitrary

killings, discrimination and the denial of fundamental freedoms such as liberty of movement. Indeed, scholars such as [Jennifer Brobst](#) and [Kimberley McKinson](#) warn that Earth's history of violent colonial legacies could be repeated in the 'outposts of outer space' and international space law's silence on the issue of human rights compounds the problem. There is growing disquiet about how human rights can be protected in outer space to preserve the realm as a '[shared international commons for all humankind](#)'. With the growing supremacy of corporations in outer space, is it inevitable that they will prioritise their business interests, with the ultimate goal of profit maximisation at the expense of human rights? Since there is still no international treaty regulating business enterprises in outer space, this article considers whether the [UN Guiding Principles on Business and Human Rights \(UN Guiding Principles\)](#) could provide a starting point for corporate human rights due diligence. In particular, Guiding Principle 15 provides that business enterprises must 'identify, prevent, mitigate, and account for how they address their impacts on human rights' and rectify 'any adverse human rights impacts they cause or to which they contribute.' This article will consider the degree to which space companies will be required to exercise human rights due diligence in outer space and especially what mechanisms they will need to adopt to evaluate, mitigate and remedy human rights impacts. While the [UN Guiding Principles](#) specify that it is a 'global standard of expected conduct for all business entities' and 'exists independently of States' abilities and/or willingness to fulfil their own human rights obligations,' this article will explore whether a bespoke human rights due diligence mechanism needs to be developed for business enterprises operating in outer space.

## **The UN Guiding Principles and the Corporate Responsibility to Protect Human Rights**

Scholars are increasingly concerned that the international legal framework is ineffective in regulating corporations engaged in outer space use and exploration. Zeldine O'Brien, [Bartisz Ziemblicki and Yevgeniya Oralova](#) opine that the aim of the five main outer space treaties is to regulate state conduct<sup>1</sup>. However, Article VI of the Outer Space Treaty indirectly provides for corporate accountability by proclaiming that states must 'bear international responsibility for national activities in outer space ... whether such activities are carried out by government agencies or non-governmental entities.' Unfortunately, the definition of 'non-governmental entities' is not articulated in Article VI, and neither does it outline the precise duties

of non-governmental actors. No guidance is also provided on how states should monitor the conduct of corporate actors or how liability should be attributed to them for breaches of outer space law. [As Yuan notes](#), outer space law was crafted at a time when the eventual rise of space companies was not foreseen. This has arguably led to a legal vacuum where the legal status and duties of corporations in outer space remain contested and unclear. With little guidance from the United Nations Office for Outer Space Affairs, which supports states to develop domestic legal frameworks to regulate outer space use and exploration, evidence is emerging that such ‘legislative measures continue to fall short of ensuring their legal accountability and responsibility for potential and actual human rights impacts.’ With the increasing possibility that humans will eventually live in outer space, research on the extent to which space companies are obliged to observe human rights due diligence is vital.

Adopted unanimously in 2011 by the UN Human Rights Council, the UN Guiding Principles could provide a foundation for establishing future human rights standards for corporations in outer space. In particular, they emphasise the policies and processes that business enterprises must adopt to ‘know and show’ they respect the [human rights of stakeholders and understand global society’s expectations](#). Indeed, a [comprehensive study conducted by Rachel Davis](#) on corporations conducting business in armed conflict zones found that ‘there has been an incentive for business to engage with these expectations as governments, investors, civil society organisations, and others increasingly use the Guiding Principles as the benchmark for assessing companies’ human rights performance.’ While they do not create new duties and obligations under international law, the Guiding Principles strive to be a [‘blueprint for the steps all States and businesses should take to uphold human rights.’](#) Embracing the ‘Protect, Respect, and Remedy’ model, the 31 Guiding Principles affirm that all types of business enterprises have an independent responsibility to respect human rights and in doing so must exercise human rights due diligence to identify, mitigate and confront the impact of their business activities on human rights. Human rights that corporations have a responsibility to observe include those laid down in the Universal Declaration of Human Rights 1948, the International Covenant on Civil and Political Rights 1976, the International Covenant on Economic, Social and Cultural Rights 1976 and the International Labour Organisation’s Declaration on Fundamental Principles and Rights at Work 1998 (as amended in 2022). Moreover, human rights violations can also be asserted by the corporations themselves. [Article 17 of the Universal Declaration of Human Rights](#),

for instance, provides that ‘everyone has the right to own property alone as well as in association with others [and] [n]obody shall be arbitrarily deprived of his property.’

[As noted by John Ruggie and John Sherman](#), the UN Guiding Principles distinguish between the duty of states to protect and enforce human rights within their territorial boundaries and the responsibility of businesses to protect human rights in the conduct of their enterprises. In particular, they note the corporation’s responsibility is neither based on nor analogous to state-based law. It is rooted in a transnational social norm, not an international legal norm. It serves to meet a company’s social licence to operate, not its legal licence, as Ruggie proclaims. However, the use of the phrase ‘responsibility to protect’ was intended to signify the non-legal binding nature of the Guiding Principles. Even though corporations may be considered “organs of society,” they are specialised economic organs, not democratic public interest institutions. As such, their responsibilities cannot and should not mirror the duties of States.<sup>22</sup> Crucially, a corporation’s responsibility to protect ‘exists independently of the State’s ability or willingness to meet its own duty to protect human rights.’ In particular, the Commentary to Principle 11 of the UN Guiding Principles provides that the responsibility ‘exists over and above compliance with national laws and regulations protecting human rights.’ Thus, if a state opts not to legislate to protect a particular human right, corporations engaging in business enterprise from this location nevertheless have a responsibility to observe this right.

### **Challenges Addressing Human Rights Due Diligence in Outer Space**

The precise application of the phrase ‘human rights due diligence’ as delineated in the UN Guiding Principles in the outer space context remains to be seen. Compounding this dilemma is the fact that two different meanings of the phrase are apparent from a reading of the UN Guiding Principles, despite no admission in the document. As discussed elsewhere, ‘[i]n business, the term is used frequently to describe methods to manage commercial risk’ while human rights lawyers, on the other hand, harness the phrase to describe ‘a standard of conduct required to discharge an obligation.’ [As noted by Bonnitcha and McCorquodale](#), the UN Guiding Principles provide no guidance on how both meanings of the phrase are harnessed in the document and how they intertwine in the context of business and human rights. Without clear guidance, there are concerns that this ‘[encourages the](#)

[incorrect view that implementing due diligence processes is sufficient to discharge businesses' responsibility to respect human rights ... and may encourage "tick-box" exercises that allow businesses to claim that they are compliant with the Guiding Principles.](#)' Consequently, how can the UN Guiding Principles be regarded as a valid expression of the conduct expectations of corporations in outer space when the level of conduct needed to satisfy the 'responsibility to protect' threshold is not clearly delineated. The often dangerous and unpredictable nature of outer space use and exploration exacerbates this dilemma. If human rights due diligence is intended to be a continuous exercise, Bonnitcha and McCorquodale have suggested that one construal of the UN Guiding Principles is that businesses will only be held responsible for human rights violations that arise from their ['failure to act with reasonable diligence.'](#) So, if a company has endeavoured to exercise human rights due diligence during the conduct of its activities in outer space, it will not be held responsible if unforeseeable human rights violations occur.

Another understanding of the UN Guiding Principles is that a space company will be regarded as having breached its human rights responsibilities whenever a violation occurs, even if it could not have been reasonably foreseen. If this interpretation of the UN Guiding Principles is to be accepted, a space company will be compelled to provide a remedy even if they have exercised human rights due diligence. However, future research is needed on what body at the international level would be able to take action to ensure that a remedy is provided. Potentially, the UN Security Council would have a role, by encouraging states to comply with their obligation to protect human rights and ensuring that victims of corporate human rights violations have access to a remedy. Academics such as Bonnitcha and McCorquodale clearly believe the second approach is most consistent with a reading of the UN Guiding Principles [as a coherent whole and with international human rights law.](#) Thus, space corporations would not only be responsible for the human rights impacts of their own activities but also potentially those of third parties with whom they have a business relationship. Very little research has been conducted on the potential human rights impacts of state and corporate activity in outer space, and the practicality of applying the UN Guiding Principles. It is also essential to highlight that not all scholars agree with Bonnitcha and McCorquodale's construal. For instance, Ruggie and Sherman argue that it is not ['aligned with the Guiding Principles, and they fall well short of the Guiding Principles'](#) own scope for the

conditions of enterprises' responsibility to respect human rights and provide for or contribute to, remedy.'

While there is a global trend towards encouraging corporate self-regulation, space companies have yet to develop human rights due diligence policies, and undoubtedly, [compliance with the UN Guiding Principles will be difficult to monitor in the outer space environment](#). At the same time, the UN Guiding Principles do not provide guidance on whether space companies will need to adopt a generic human rights due diligence policy or ensure that due diligence is incorporated into all its existing systems and processes, especially its health and safety, environmental, oversight and governance mechanisms. Human rights treaties and conventions have been specifically tailored for Earth-based living conditions, and while researchers have started to consider the scope and application of human rights in outer space, no research has examined whether it will ever be legitimate or even necessary to restrict fundamental rights and freedoms due to the perilous environment. Nevertheless, space companies are increasingly engaged in discussions on developing sustainable outer space use and exploration. The Space Industry Statement in Support of International Commitments to Not Conduct Destructive Anti-Satellite Testing, which was [launched by the Secure World Foundation in November 2023](#), seeks to encourage sustainable outer space activity. Over forty companies have signed up to the initiative, signalling the '[growing involvement of private space actors in promoting the sustainability of outer space](#).' Other mechanisms to emerge from the space industry in recent years include the Net Zero Space Initiative and the Space Safety Coalition. While these initiatives not only indicate that an increasing number of space companies recognise the need to engage in sustainable outer space activity, which could serve '[as a foundation for further legal development](#),' they also suggest a willingness to perhaps develop a set of bespoke principles for human rights due diligence in outer space.

Nevertheless, there is evidence emerging that some space companies may decline to adhere to specially tailored principles and instead require individuals travelling or residing in outer space to sign human rights waivers. SpaceX, for example, has not yet become a member of any of these initiatives despite being one of the foremost players in the industry. Nevertheless, the [Commentary on Principle 18](#) provides that business enterprises must show a commitment to assessing its actual and potential impact on human rights 'prior to a proposed business activity' and also 'prior to

major decisions or changes in the operation (e.g. market entry, product launch, policy change, or wider changes to the business); in response to or anticipation of changes in the operating environment (e.g. rising social tensions); and periodically throughout the life of an activity or relationship.’ Thus, the scale and scope of the impact on “affected stakeholders” will need to be taken into careful consideration before a company conducts outer space activity. The findings of its human rights impact assessment will also need to be incorporated into decision-making processes and remedial steps taken to prevent human rights impacts. While it is beyond the scope of this article, an interesting line of future research inquiry would be to examine the potential role of non-governmental organisations, such as Human Rights Watch, to monitor the human rights impacts of corporate activity.

As specified in UN Guiding Principle 18 and its Commentary, space companies will need to utilise international human rights treaties and conventions ‘as a reference point’ for ‘meaningful consultation with potentially affected groups and other relevant stakeholders,’ especially ‘individuals from groups or populations that may be at heightened risk of vulnerability or marginalization, and bear in mind the different risks that may be faced by women and men.’ Since Article 1 of the Outer Space Treaty 1963 provides that the ‘exploration and use of outer space ... shall be carried out for the benefit and in the interests of all countries, and shall be the province of all [hu]mankind,’ can a compelling argument be made that space companies should be encouraged to publish the outcome of consultations on the human rights impacts of their activities? Indeed, the Commentary to Principle 23 provides that they must ‘consult externally with credible, independent experts, including Governments, civil society, national human rights institutions and relevant multi-stakeholder initiatives.’ Arguably, states and humankind are space companies’ largest stakeholders, and future research needs to examine how consultations on the potential impact of their outer space activities on human rights will be conducted. Could the United Nations Committee on the Peaceful Uses of Outer Space, for instance, be harnessed as a vehicle for such consultations? Or would a different forum to facilitate and steer consultations be preferable and more effective?

As discussed above, it is conceivable that some space companies may decline to observe the UN Guiding Principles and may even argue that they do not apply to their outer space activity. However, [Principle 23](#) states that they must ‘respect internationally recognised human rights, wherever they operate ....’ Space

companies must also ‘treat the risk of causing or contributing to gross human rights abuses as a legal compliance issue.’ While future outer space exploration will lead to an exponential increase in the number of humans living and working in outer space, it will nevertheless remain a dangerous and isolating activity where compliance with the UN Guiding Principles will be challenging. Nevertheless, the Commentary to Principle 23 provides that space companies will be ‘expected to respect the principles of internationally recognised human rights to the greatest extent possible in the circumstances and be able to demonstrate their efforts in this regard.’ In view of the tentative plans to conduct space resource utilisation activities as well as establish installations on the Moon and Mars, how can corporations ensure that human rights breaches are avoided, not just by the company but also by its directors, executives and general employees? Future research and discussion are urgently needed to assess whether new guiding principles on human rights due diligence specifically tailored to business activity in outer space are needed.

At present, the UN Guiding Principles provide no guidance on how space companies should evaluate whether a potential human rights breach is severe. Instead, they are recommended not to conduct themselves in a way that could ‘exacerbate the situation.’ To alleviate the breach, they are required to carry out ‘cross-functional consultation within the enterprise’, but very little guidance is provided on how business enterprises should conduct this. With the multitude of different actors concerned with outer space use and exploration, ‘cross-functional consultation’ may prove arduous for space companies. As John Sherman contends, it is not the case that [‘a company’s responsibility to respect all human rights should be vested in a company’s legal department and made a matter solely of legal compliance and legal risk.’](#) On the contrary, Principle 23 (b) provides that businesses will need to modify how they conduct their enterprise by finding ‘ways to honour the principles of internationally recognised human rights when faced with conflicting requirements.’ A considerable challenge is the fact that many prominent space corporations are registered in the United States. Even though the United States is a signatory party to the International Covenant on Civil and Political Rights, [it has vehemently rejected its extraterritorial application](#). It also [withdrew from the negotiations](#) for the UN Draft Treaty on Business and Human Rights for similar reasons. Crucially, if a state declines to authorise a space company to launch from its soil due to concerns about failures to observe human rights, there is a possibility

that the business enterprise will simply shift its operations to a country with more relaxed human rights monitoring processes.

Space companies are at a crossroads and will need to think carefully about how operating in the outer space environment could lead to human rights violations. One way for companies to respond to this potential risk would be to consult not only with human populations, who will potentially live and work in outer space, but also with non-governmental organisations such as the International Institute for Space Law, the Secure World Foundation and the Mars Institute, as well as psychologists and medical and human rights experts. While there is increasing awareness of the [impact that the outer space environment has on the human body and mind](#), ongoing [consultation with communities living and working in outer space](#) will be important. Without more comprehensive guiding principles, it remains to be seen how space corporations will achieve this meaningful consultation.

### **Concluding Thoughts**

The above analysis suggests that despite the UN Guiding Principles having gained considerable support since their inception, the international community will need to carefully explore a range of policy and regulatory approaches for business enterprises to protect human rights in outer space. Unfortunately, guidance has yet to be developed on how corporate human rights due diligence in outer space can be monitored, given the remote and perilous environment. The UN Guiding Principles clearly provide that a space company must exercise human rights due diligence even if a state has not legislated for a particular human right. However, concerns are growing that space corporations will have relative freedom to select which human rights they will safeguard and the process by which they will do so. To prevent this from occurring, new international principles to guide human rights due diligence in outer space need to be designed. In addition, an independent body to monitor how and to what extent corporations are implementing these principles needs to be instituted. The effectiveness of this proposed mechanism, and whether it is likely to be supported by space companies and the international community, is beyond the scope of this article. Empirical research is needed to determine whether the proposed mechanism would likely dissuade space companies from perpetrating human rights violations, not only due to the reputational risk but also potential extraterritorial legal claims, both civil and criminal. Space companies will need to

demonstrate a commitment to operating and administering extraterrestrial settlements safely and with integrity if they are to encourage individuals to reside there. It remains to be seen what mechanisms space companies will invoke to achieve human rights due diligence and succeed in their ambitions.

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**Notes and References:**

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<sup>1</sup> Zeldine O'Brien, 'To Boldly Go? Private Contractors for the Carriage of Persons in Space, Exclusion Clauses and Inter-Party Waivers of Tortious Liability', *Dublin University Law Journal*, Vol. 29, 2007, pp. 341-373.

<sup>2</sup> John Ruggie, 'Business and Human Rights: The Evolving International Agenda', *American Journal of International Law*, Vol. 101, 2007, pp.819-840 at pp. 826-827.