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REVISITING THE MOON AGREEMENT: ANALYZING 45 YEARS OF POLICY AND LEGAL TRENDS THROUGH THE LENS OF NEWSPACE COMMERCIALIZATION

Abstract

The rise of space commercialization and privatization has provoked much discussion and challenges to existing outer space law, such as the 1979 Moon Agreement, the primary legal instrument that governs man-made development on celestial bodies. Its effectiveness and relevance in the 21st century have been questioned, as demonstrated by its non-ratification by the most active space-faring nations, and the adoption of competing multinational agreements, such as the Artemis Accords.

Various stakeholders have a vested interest in advocating for the commercialization and appropriation of outer space. Governments want to solidify legal claims for the deployment of national security assets such as lunar bases, while natural resource companies desire legal clarity for safeguarding profits from extraterrestrial resources such as minerals, water and energy. In both cases, the commercialization of outer space could present novel prospects and potentially revolutionize the economic and technological landscape. Historically, the main issues of contention that prevent widespread ratification include the prohibition of states, commercial entities or individuals owning extraterrestrial property (the "common heritage" clause), the ambiguity regarding the level of control a private/national entity has in using extraterrestrial resources for commercial gain, and the ambiguous requirements for equitable resource sharing from commercial ventures, in Article X.I.7.4.

There has been a vast collection of legal, academic and government-funded literature on this topic arguing either rewriting and supporting the Moon Agreement, however, no systematic review has been conducted to date. For example, Hertzfeld and Dunk in 2005 argued that property rights and the right to extraterrestrial income appropriation can be achieved without discarding the "common heritage clause", while Gilson in 2011 discussed a potential framework for lunar litigation based on terrestrial analogs, such as the Antarctic Treaty. Various incentivization schemes for nations to sign onto a revised agreement have also been proposed, ranging from game-theoretic to Realpolitik approaches. This paper seeks to collate and review the vast sum of literature on this topic to analyze the underlying trends based on national and commercial stakeholders and interest groups, with a specific focus on how recent technological advances in NewSpace since 2010-2020 drive policy changes. A meta-analysis will assess and evaluate the feasibility of alternative frameworks and methodologies from the last 45 years based on recent social, economic, and political realities. Analytical results will then be used to develop a new tentative framework based

on common trends that incorporate concepts within corporate, property, environmental, maritime, and international law.