

# Mine, mine, mine!

## On the new US space resource policy and attitude towards outer space

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Maximilian Bertamini

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In an impressive display of [questionable timing and priorities](#), the US President may just have rung in the first round of a new space age. While “non-viral” news currently fly under the radar, the legal and policy implications of the newest ‘[Executive Order on Encouraging International Support for the Recovery and Use of Space Resources](#)’, quite literally, go above and beyond. In response to a [recent post](#) on the subject by Michael Friedl and Maximilian Gartner, this post weighs in on the newest developments in international outer space law and highlights their potential for international progress, but also their risks of inequality and conflict.

### The relevant international law revisited

Before discussing the US executive order, a brief overview of the international legal regime on space resource recovery is due. When it comes to resource extraction and utilization in outer space, two treaties must be considered. The first one is the so-called [Outer Space Treaty](#) (OST) of 1967. While its Article I prominently declares that outer space “shall be free for exploration and use by all States without discrimination of any kind” and that the exploration and use of outer space “shall be the province of all mankind”, Article II prohibits the national appropriation of outer space “by claim of sovereignty, by means of use or occupation, or by any other means.”

The second treaty is the so-called [Moon Agreement](#) (MA) of 1979. This considerably younger treaty’s regime for space resources (the OST was even concluded before the moon landing) can be distinguished from the OST’s on two major bases.

First, the MA rules are significantly more specific than those of the OST. While reiterating the OST’s provisions on the freedom of use and non-appropriation of outer space, Article 11 MA specifies that “[t]he moon and its natural resources are the common heritage of mankind” (in (1)) and that “[n]either the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental or non-governmental organization, national organization or non-governmental entity or of any natural person” (in (3)).

Second, the MA has significantly fewer states parties than the OST. Ninety-one fewer, to be specific. Besides France and India, who have not ratified the MA yet, no major spacefaring nations are among the 18 member states of the MA. Many scholars identify a link between the restrictively precise language of the MA and its unpopularity among (spacefaring) states.

The paralyzing legal uncertainty for [states](#) and [private entities](#) resulting from the dichotomy of this legal regime has been explained in greater detail by the previous post. Summed up, it is unclear, what exactly is covered by the prohibition of national appropriation “by any other means” and in how far the non-appropriation clause applies to the acquisition of property. Even though private entities are not directly bound by the two treaties in question, they are not willing to undertake expensive mining ventures into outer space without certainty that states may and in fact will recognize property rights over extracted space resources.

While the previous post focused on the legal uncertainty revolving around resource extraction in outer space, this contribution aims to direct attention to the one thing which appears to be crystal clear about the OST’s non-appropriation regime. In light of the OST’s focus on the benefit of all states and mankind in general, as well as the Cold War circumstances of its conclusion, we can confidently state: Outer space is not simply up for grabs for those states which happen to have the necessary technical and financial capabilities. The OST wants to prevent power struggles over any part of outer space. Consequently, the legal status of outer space in general is considered to be *res communis*, a global commons.

### **The new executive order**

The new executive order, however, is apparently animated with a different spirit. It gives reason for hope and skepticism and the same time, depending on whether we look at its approach towards space resources or at its attitude towards outer space as such. As far as space resource extraction is concerned, the executive order follows the footsteps of the so-called ‘[Space Resource Exploration and Utilization Act of 2015](#)’, which allows US citizens to “possess, own, transport, use, and sell the [...] space resource obtained in accordance with applicable law” (§ 51303). The law passed under the Obama administration provoked considerable backlash in the international outer space law community, as it poked the beehive that is the legality of property rights under Article II OST. Yet, many scholars consider the acquisition of property rights over space resources (unlike property over extraterrestrial real estate) permissible under the non-appropriation clause. The argument goes that a global commons prevents states from appropriating the commons itself, but not its resources, similar to the nautical idea of “owning the fish, not the sea”. Irrespective of the merits of such analogies (after all, fishing on the high seas has been a common practice long before any international law of the sea, while no space resource has been commercially extracted yet) resource/property acquisition in – not over – global commons appears conceivable.

The good news is that this time the US space policy ostensibly favors international cooperation. According to the executive order, the Secretary of State “*shall take all appropriate actions to encourage international support for the public and private recovery and use of resources in outer space*”. This initiative is intended to reduce legal uncertainty relating to space resource extraction. As the technical feasibility of commercial space resource extraction inches closer, the dated space law regime would benefit from updates allowing for the safe and reasonable realization of outer space’s enormous scientific, economic and developmental potential for humanity as a whole.

At the same time, the executive order rings alarm bells, when we look at its categorization of outer space. The order expressly states that the US do *not* view outer space as a global commons and that the purpose of the encouragement of international cooperation is to accrue support for this view – consistent with applicable law which, at the time, includes the OST. This small statement begs one big question: If outer space is not a global commons, what is it?

The international law category left would be *terra* or *res nullius*, i.e. land or a thing that is nobody's. On the flipside, it would be open to appropriation by anybody. First come, first served. It is obvious why this would appeal to the US and their potent space companies. At the same time, it is obvious that this conception of outer space does not resonate well with the object and purpose behind the non-appropriation clause on the one hand and the overall inclusive and cooperative nature of the OST as a whole, on the other hand. Article XV OST does allow for amendments and, more generally, states are free to subsequently agree on the interpretation of a treaty or the application of its provisions. Whether such agreements which would undermine the conciliatory purpose of the OST at the expense of the rest of humanity can be made in good faith is highly doubtful, to say the least. Especially, if one agrees that the concept of "global commons" does not necessarily prohibit the extraction and subsequent appropriation and utilization of its resources *per se*.

In conclusion, attempts to reduce legal uncertainty are generally laudable. The overall direction of the current US approach is, however, worrying. As space resource extraction is about to become feasible, it is important that states, while regulating resource extraction from a global commons, do not do away with the global commons status itself. At the same time, given that the current legal uncertainty does in fact slow down humanity's progress on and through the final frontier, one must hope that the US attempt – as egoistic as it may be – will at least instigate a long overdue discussion, so that resource conflicts in space do not one day turn into military ones

*Maximilian Bertamini is a Research Associate and PhD Student at the Institute for International Law of Peace and Armed Conflict (IFHV).*

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