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The US Space Launch Competitiveness Act of 2015

Jurist guest columnist [Frans von der Dunk](#) of the [University of Nebraska–Lincoln College of Law](#) discusses the recent US Space Launch Competitiveness Act

Edited by Elizabeth Dennis

On November 25, 2015, President Obama signed into law the [US Commercial Space Launch Competitiveness Act](#) (H.R. 2262). This Act encompasses four titles: I. Spurring Private Aerospace Competitiveness and Entrepreneurship (acronym: SPACE), II. Commercial Remote Sensing, III. Office of Space Commerce and IV. Space Resource Exploration and Utilization.

[Title I](#) amends the [Commercial Space Launch Act](#) which comprises the licensing regime for launches, re-entries and launch port activities, including those carrying spaceflight participants on board. Most notably it updates the methodology for determining the cap on third-party liability for licensees, includes spaceflight participants in the third-party liability insurance as well as in the mandatory cross-waiver of contractual liability and charges relevant government authorities to develop approaches toward authorization and supervision of new categories of private commercial space activities and orbital traffic management. It also determines that “government astronauts” cannot be flown by licensees merely on the condition of a formalized “informed consent” on the part of the former. Further updates apply to the utilization of the [International Space Station](#), the involvement of individual US states in the commercial launch sector and future US government space launch systems.

[Title II](#) amends the [Land Remote Sensing Policy Act](#), which allowed for the licensing of private commercial satellite remote sensing operations, and essentially requires the Secretary of Commerce to provide an overview of licensing practices in this sector so far and any perceived need to update the statutory regime in this respect.

[Title III](#) relabels the existing [Office of Space Commercialization as Office of Space Commerce](#) and rephrases its purposes.

Without a doubt [Title IV](#) the [Space Resource Exploration and Utilization Act \(Chapter 513 of 51 USC\)](#) [pdf], which addresses in a preliminary fashion space resource exploitation by that token is the most innovative and disputed part of the Act, certainly in an international context. Considerably shorter than various earlier versions, it consists of three parts. The first one provides the short title, while the last one ascertains that, at least from the US perspective, this Act does not violate the recognized obligation under [Article II of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies \(also known as the Outer Space Treaty\)](#) [pdf]. The middle part provides for the substantive amendments by way of three sections.

Section 51301 most notably provides for the definitions of “space resource” and “asteroid resource,” the latter being a subset of the former. Beyond this definitional Section, the Act mainly aims to achieve two things. By way of Section 51303 it ensures that US citizens, which includes US commercial operators, will enjoy ownership (even though the terms “ownership” or “property” are not used) over space resources once harvested, “in accordance with applicable law, including the international obligations of the United States.” This means firstly that the recognition of such ownership rights is only applied to the extent of US jurisdiction, essentially meaning US territory and/or US courts, as the US cannot dictate what other states should do or the extent to which non-US citizens outside of the US could be given such rights or be held to corresponding obligations.

Secondly the reference to “the international obligations of the US” refers to the aforementioned Article II of the Outer Space Treaty, which prohibits “national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” Following inter alia the authoritative [declarations](#) [pdf] on this issue of the International Institute of Space Law (IISL), this means that no private appropriation of parts of outer space is allowable either.

The question whether the prohibition of ownership of “space estate” would also give rise to the prohibition of ownership of specific resources or even of commercial exploitation thereof as such, has not been addressed by the Outer Space Treaty, and essentially has not been conclusively settled at an international level.

Proponents of equation of the one prohibition to the other usually argue that (1) celestial bodies as part of the “province of all mankind” (the term Article I of the Outer Space Treaty uses to define the legal status of outer space, including celestial bodies) could only be commercially exploited, if at all, under an international regime to be duly developed, as if it were a “common heritage of mankind”; and/or (2) that the prohibition of national appropriation, provided for by Article II of the Outer Space Treaty in quite strict and all-inclusive terms, automatically would give rise to a prohibition to apply any national authorization regime regarding such intrusive activities unilaterally; and/or (3) that, following the general context of the Outer Space Treaty’s drafting, the explicit freedom of “exploration and use” and scientific investigation does not refer to commercial use.

The better view is that the unequivocal prohibition of appropriation of celestial bodies as such does not give rise to a prohibition of commercial exploitation. This view is based on the following arguments.

- 1) The baseline approach to outer space is a general freedom, which can only be limited by international consensus (such as has occurred with respect to the high seas and Antarctica, the two other areas of human activity with which outer space is most commonly compared), and there is no explicit prohibition of commercial exploitation to start with. The only relevant requirement provided by the Outer Space Treaty is thus that of Article VI, obliging states to authorize and continuously supervise non-state activities falling within their jurisdiction—which also suggests that once that requirement is fulfilled such private space activities are in principle lawful unless specific other prohibitions or conditions apply.
- 2) Reading the “province of all mankind” provision as a ban on commercial use as long as not subject to any international regime effectively equates it to the “common heritage of mankind” concept, which—at least originally, see hereunder sub (2-b)—indeed required an international regime including mandatory transfer of technology and mandatory sharing of harvested materials with non-investors. The [1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies](#) (also known as the Moon Agreement), however, did precisely try to do that—it declared the Moon and other celestial bodies to be the “common heritage of mankind” and called for an international regime to be developed with regard to any commercial exploitation—and failed precisely for those reasons: none of the major spacefaring nations wanted to sign on to such a regime. Thus a contrario the “province of all mankind” cannot be seen as an equivalent to the “common heritage

of mankind” requiring such an international regime before commercial exploitation might be allowed. By contrast it should be equated to the regime applicable to the high seas, where the prohibition of appropriation by either nations or private citizens of any part thereof does not take away their rights to, for example, fish or otherwise commercially exploit resources, as long as within applicable international law (such as for instance regarding overfishing).

- 3) The only area of international law where the “common heritage of mankind” concept has been actually elaborated along the lines sketched concerned the ocean floor underneath the high seas, as per the [1982 United Nations Convention on the Law of the Sea](#) [pdf]. However this convention needed to be considerably modified in 1994 precisely in order for major industrialized countries to ratify it. It does now allow commercial exploitation of the ocean floor subject to national licenses under a fairly summary international regime—such as could be argued to exist today in outer space with reference to the Outer Space Treaty and other applicable legal principles of international space law.
- 4) “Use” has generally come to be acknowledged as including commercial use and exploitation. From the early 1960s onward for instance outer space was used by commercial satellite communication operators. Thus the United States respecting the prohibition of Article II of the Outer Space Treaty, by way of the current Act provides for a first step toward compliance with the obligations of authorization and continuing supervision under Article VI of the Outer Space Treaty. This is also where the other substantive clause, Section 51302, comes in: it calls upon the US President to ensure that such authorization and continuing supervision will actually be properly provided for in the near future—that is before such commercial resource harvesting activities will actually take off.

This section also and at the same time requires the President to work on the international level toward an appropriate regime for such activities, further elaborating the embryonic regime provided under the Outer Space Treaty, as the United States cannot obviously regulate this for other countries or their operators. In that sense, the Act is also an invitation to the international community to work together toward such an international regime, hopefully along the same lines as the US national one to be further developed.

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