

IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)  
Moon and Mars Settlement: Open Legal Issues (2)

Author: Prof. George (Georgios) D. Kyriakopoulos  
National and Kapodistrian University Of Athens, Greece

COLONIES ON THE MOON (AND/OR MARS)? NEW CHALLENGES FOR INTERNATIONAL AND  
NATIONAL LAW

**Abstract**

It seems that space exploration (and, with it, the “space race”) is back on track: Through Space Policy Directive 1 (2017), the United States already expressed the intention to “lead an innovative and sustainable program of exploration . . . to enable human expansion across the solar system. . . [T]he United States will lead the return of humans to the Moon for long-term exploration and utilization, followed by human missions to Mars and other destinations”. Russia and China, for their part, announced, in 2018, that they plan to jointly build a lunar base. Similar projects are equally advanced by the private sector (such as the Elon Musk’s ambition to start a colony on Mars in the years to come).

The planned creation of colonies on said celestial bodies implies the establishment of permanent human communities on them as well as the creation of permanent structures on (or below) their surface. Obviously, this will be a new phase in the context of space use and exploration. However, it is not quite clear whether international (space) law in force is sufficient to regulate such situations, which, as of today, are also beyond the scope of national space legislation.

Although the Outer Space Treaty defines the freedom of exploration and use, it does not provide specific regulation on the subject matter. Of course, Article II declares the non-appropriation of the Moon and other celestial bodies, while Article IV provides for their use “exclusively for peaceful purposes” and forbids the establishment of military installations on them. Further, Article VIII vaguely refers, *inter alia*, to “objects constructed on a celestial body”, whereas Article XII confers a right to visit “stations, installations, equipment and space vehicles on the Moon and other celestial bodies” of another State party to the Treaty. The Moon Agreement goes further than the OST (Articles 8, 9, 12, 15), however it is poorly ratified and not universally accepted.

In view of the above, this paper aims at exploring the effectiveness of the existing international legal framework in regulating permanent colonies on the Moon or Mars. It also tries to evaluate whether there is scope of application for national laws, since, pursuant Article III OST, space activities must be carried on “in accordance with international law”. Last but not least, the paper intends to enter uncharted waters: which legal framework would be applicable against an independent lunar (or martian) community?