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

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A EUROPEAN PERSPECTIVE OF THE ROLE OF INTELLECTUAL PROPERTY IN SIGHT OF THE FUTURE MOON AND MARS SETTLEMENTS

Abstract

Over the past decade there has been a transition from government to private enterprise conducting space-related activities. In the current new space economy landscape where the Intellectual Property (IP) is playing a key role for the industry competitiveness, the commercialisation of outer space is developing at an incredibly fast pace and it is not possible to affirm the same regarding the evolution of the IP regulatory regime.

Looking at the not-so-far future and thus to Moon and Mars human settlements, there are several IP related questions looking for a specific answer. Figuring out the construction of the Lunar Gateway and in the light of the development and patent of disruptive technology inventions, the question of the overall evolution of the Intellectual Property regime is fundamental.

In the specific case of the International Space Station, the complexity of the Intellectual Property Rights (IPRs) legal regime lies in the different modules provided by different station's partners. The Article 21 of the Intergovernmental Agreement (IGA) recognises the jurisdiction of each partner's law court and allows for national laws to be applied in the modules belonging to the partners. Will this territorial approach results compatible with the cooperative framework set-up among the partners of the station and, consequently, for collectives Moon and Mars future plans?

In June 2019, the U.S. National Aeronautics and Space Administration (NASA) announced the opening of the International Space Station for commercial business to leverage the U.S. industry innovation and to accelerate Low-Earth Orbit (LEO) economy. NASA will continue research and testing in LEO to enlighten its lunar exploration plans, while collaborating with the private sector to test technologies and fortify the growing space economy.

From a European standpoint, the European Space Agency (ESA) opened to new private business opportunities. In December 2019, ESA rolled out a "Call for Commercial Partnerships for Space exploration" seeking new ways to partner with the space or non-space private sector to facilitate the realisation of its exploration ambitions.

In the light of the future exploration programs involving Europe and the steady growth of private actors contributing to the competitiveness of the European industrial sector by supporting novel business cases, the aim of this paper is to analyse the key role of the intellectual property and patenting of innovative technology solutions in the current scenario and in the emerging LEO and Lunar economies.