

Mars Exploration (3)
Mars Exploration (2) (2)

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LEGAL ISSUES REGARDING MARS EXPLORATION AND COLONIZATION

Abstract

The future of human presence on Mars raises a certain number of legal issues. Those issues differ from the ones raised by lunar exploration. First, Martian exploration is not that near and will maybe not be made with current space law principles. Secondly, the human interests for the Mars are emerging from private entities (SpaceX), while Mars projects are being invested by the private sector (European Space Agency, Nasa, etc.). Mars exploration also aims to set space colonization premises. We will present international law principles applying to human activities on Mars only ; focusing on lunar projects already in preparation or already announced by credible actors. The regime applicable to robots already exploring, as it is clear, will be shortly expose in introduction.

Once this introduction made, we will expose legal issues concerning human activities on planet Mars. legal issues for Mars exploration concerns in one hand the legal regime regarding the red planet itself ; and on the other hand the legal regime concerning human activities conducted on Mars.

Firstly, the specificity of environmental protection of Mars is the terraforming project, already on the study by NASA. If humans want to ensure their presence on Mars one option is the terraforming of Martian atmosphere : existing international law does not permits this modification of a celestial body. There are conditions states must fulfill to terraform Mars legally, this presentation aim to develop those points. Another point is the legal protection offered by Art IX of outer space treaty if some bacterial lifeform is found on Mars.

Secondly, we will explain legal issues caused by human scientific exploration and occupation of Mars : the risk of appropriation, exploitation of Martian resources, etc. Colonizing the red planet out of international cooperation will raise jurisdiction conflicts between states to determine applicable law is case of litigation among two stranger astronauts.

This presentation will expose short terms issues raised by Martian activities as long term issues.