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> Author: Mr. Petr Bohacek Czech Republic, pbohacek@email.cz

SUSTAINABLE SPACE GOVERNANCE: CONTEXT-BASED LEGITIMACY FOR MARS SETTLEMENT

Abstract

Exploring space requires not only innovative technical solutions but also new formats of human organizing, management and governance. With the focus given to effective and safe existence of bases and outposts in the outer space, new governance models will require difficult decisions about the basic human rights and values to ensure their sustainability. And while small crews of Apollo-like missions required a simple top-down hierarchy, larger long-term bases of hundreds of people will represent a complex society with a more complex governance regime. Ensuring legitimacy, understood in Max Weber's sense as the acceptance of political authority, will determine the long-term sustainability of such arrangements. There are different sources of legitimacy that are usually split along the fault lines of the democratic dilemma, between effectivity and democratic participation. Such legitimacy in form of acceptance of political authority can be based on effective, fast-tracked, expert-based and exclusive problem-solving, as well as on acceptance of the system truly reflecting the persons' interests through inclusive and democratic participation. The harsh environment will likely prioritize effectivity, expert rule, and survival over democratic participation and individual rights that might complicate, slow down and problematize the decision-making processes. However, ensuring that the preferences and needs of the subjects living at the Mars settlement are reflected is not necessarily a question of morality and ethics but also of effectivity originating from opinion diversity and most importantly long-term sustainability. In the ever-changing and difficult Martian environment, social cohesion and preferences of all subjects will be key for the sustainability of a Martian society. Further, good intentions are hardly a source of legitimacy and can never substitute for representation. Scientific facts, observations as well as peoples' preference come hardly at a format of policy options and even scientists are not free of bias and social phenomenon affecting their opinions. These hard questions will be answered in different contexts on Mars than they are answered on Earth. Different goals will require different sources of legitimacy, or different tools to ensure the acceptance of the political authority by the subjects. This paper firstly introduces two distinct understandings of legitimacy from sociological and political perspectives and existing legitimacy trade-offs on Earth. Building upon this background, the paper applies context-based analysis of legitimacy to propose legitimacy mechanisms based on Martian environment and required technologies.