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SCRUM AND THE ART OF INTERNATIONAL SPACE LAW

Abstract

This paper will discuss a new paradigm for legal practitioners to approach complex legal questions facing international space law community. Actors, both commercial and governmental, are poised and ready to engage in the next phase of space exploration, cooperation, and utilization but express reluctance to engage due to the uncertain legal framework of tomorrow. The Outer Space Treaty (OTS), for example, entered into force in 1967 and yet certain terms, and the application thereof, are still the subject of vigorous debate. Further, varying national regulatory frameworks and policies have created a legal patchwork of regulations or absence of regulations that make it difficult for current and future actors to find clarity. Traditional international diplomatic efforts although promising and a bedrock of international space law, utilize glacially slow methods unsuited to the wave of innovative activity predicted and championed by humankind.

Therefore, approaching the current legal landscape through long-term solutions that have universal application—a noble and necessary end result —are perhaps not suited for the here and now. Understanding these concerns, applying iterative and agile software development principles, tools, and techniques found in SCRUM development to reduce long-term, highly speculative activities into shorter-term realistic goals can enable near-term space exploration and development. These iterative activities can proceed in parallel with, while informing and incentivizing, the development of longer-term and more complex international space law solutions.

Developed in the early 1990s, SCRUM was founded on empirical process control theory to optimize predictability and control risk. Three pillars uphold every implementation of empirical process control: transparency, inspection, and adaptation. Applying an iterative rule-making process such as SCRUM in the short-term to enable certainty for actors now and get realistic feedback on new activities could be used to inform, enable, and improve later rounds of rule-making and lay the groundwork for future legal frameworks for increasingly-complex activities.

The legal structure meant to facilitate opportunities in space exploration and cooperation should be designed to allow for approaches that are driven to reach best result and reflect the dynamic, exciting and visionary goals humankind has for space.

This paper will outline a framework for designing and executing an iterative legal framework for cislunar commercial activities. It will include substantive legal content and outline and advocate an approach that is, to our knowledge, new and original (though there are lessons to be gleaned from other areas). This paper has not been presented before.