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## EXPLORING MEGAPROJECT GOVERNANCE WITH REGARD TO COLLABORATION THROUGH THE CASE OF THE INTERNATIONAL SPACE STATION

## Abstract

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Megaprojects that push the boundaries of humanity demand vast resources and come with enormous risks. The area of space exploration is no different. Therefore, it is essential to understand the nature of such endeavors in order to ensure their success. Although these historical projects ought to give answers to the direct problems of our time, our knowledge about them is paradoxically poor. The areas that especially demand attention are the project architecture, relationships, and innovative governance solutions that promote collaboration.

The purpose of this paper is to explore the connection between governance and collaboration in the case of the International Space Station (ISS) as a megaproject. The work builds an understanding of megaprojects, governance and collaboration. Then, it identifies how governance affects collaboration over the paradox of control and flexibility within the case of the ISS.

The paper points out the necessary balance between contractual and relational governance within megaproject governance. It also finds that contractual arrangements have been dominating governance historically, and additional focus is required on the relational counterpart. Later on, it discusses five main parts of the ISS governance, legal framework, organizational structure, goals, roles and funding system, and identifies them mainly related to contractual governance. However, it points out that these parts also feature mechanisms that promote flexibility, thus providing a platform for collaborative practices to be formed. More specifically, the top tier of the legal framework provides stability, but the lower tiers offer opportunities to implement changes in the program. The goals of the ISS serve as strong motivators that put the common objectives in front of the individual agendas of the partner countries, thereby strengthening the project cohesion. Furthermore, the in-kind contributions system provides a different set of incentives through bartering compared to the traditionally used financing, and supports the collaborative environment by building closer relationships with industry partners. The paper brings practical examples for these areas from various project members up until the upper-management level working on the full lifecycle of the ISS.

Exploring the ISS governance from a perspective of collaboration as a megaproject reveals valuable lessons to solve the challenges of similar future space exploration projects.