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16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT (D3)

Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and Development (1)

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SPACE READY: THE LAUNCHPAD FOR EMERGING AGENCIES

Abstract

Space Ready: The Launchpad for Emerging Agencies seeks to provide an international comparison and analysis of the key building blocks of space agencies to make recommendations for the benefit of emerging space states.

With advances in technology and associated reduced costs, space is no longer an exclusive domain of powerful states with significant national budgets for their space programs. Smaller states, as well as a vast number of commercial enterprises, have become increasingly involved in the space arena and have demonstrated the socio-economic benefits that ensue. This recent growth in commercial space activities has not only increased state responsibility to adequately regulate the commercial sector, but has also fuelled aspiring states to capitalize on this new potential.

It is necessary to reflect on the formation of existing national space agencies, their evolution over the years, and how they carry out their mandates. There is currently a lack of research on the multifaceted roles of a space agency, and the recent advent of new actors has presented an opportunity to consider the factors that drive the success of a space agency.

To address these issues, this report compares and analyses existing space agencies by addressing their key building blocks. Specifically, it:

- investigates the forces and circumstances that determine the 'aims' of a space program,
- analyzes how the 'structure' of an agency may be shaped by the aims and in turn how the 'structure'
 may influence the pursuit of the aims,
- discusses how the 'funding model' can determine the success of the agency in fulfilling its aims, and
- investigates how the proposed space 'activities' integrate into the agency structure and funding to fulfill its aims.

It uses this information to make recommendations for emerging space states.

This report was written by an interdisciplinary and international group of participants at the Southern Hemisphere Space Studies Program 2018 conducted by the International Space University and the University of South Australia. It brings with it the passion and enthusiasm of the participants in wanting to drive and improve the future of the space industry.