

IAF BUSINESSES AND INNOVATION SYMPOSIUM (E6)
Public-Private Partnerships: Traditional and New Space Applications (2)

Author: Mr. Anupam Kumar Pilli
Australian National University (ANU), Australia

Prof. Anna Moore
ANU Institute for Space (InSpace), Australia

Mr. Eduardo Trifoni
Australian National University (ANU), Australia

Dr. Peter Linardakis
Australian National University (ANU), Australia

Dr. Lauren Bezzina
Australian National University (ANU), Australia

Prof. Anatoly Rozenfeld
University of Wollongong (UOW), Australia

Prof. Marco Petasecca
University of Wollongong (UOW), Australia

Prof. Michael Lerch
University of Wollongong (UOW), Australia

Prof. David Cohen
Australian Nuclear Science and Technology Organisation, Australia

Dr. Ian Carter
Australian Government, Australia

ENHANCING AUSTRALIA'S SPACE CAPABILITIES THROUGH PUBLIC-PRIVATE
PARTNERSHIPS: INSIGHTS FROM THE NATIONAL SPACE QUALIFICATION NETWORK
PROJECT

Abstract

The National Space Qualification Network (NSQN) established with support from Australian Space Agency's Space Infrastructure Fund represents a significant initiative aimed at bolstering Australia's capabilities in the space sector. This project, conceived with the objective of enhancing national space infrastructure, stands as a testament to the potential of targeted investments in elevating a nation's standing in the global space industry. Central to the project's success has been the strategic utilization of public-private partnerships (PPPs), which have facilitated the pooling of resources, expertise, and innovation from diverse sectors. This paper delves into the critical role these partnerships have played in not only fulfilling the project's objectives but also in shaping the trajectory of Australia's space industry.

Our analysis focuses on the impacts and implications of these PPPs, both in the realm of traditional space applications, such as satellite communications and earth observation, and in burgeoning areas of new space applications, including advanced space technology research and development. The Space Infrastructure Fund project, through its collaborative approach, has effectively harnessed the strengths and capabilities of various stakeholders, fostering an environment conducive to significant advancements in the space domain. In addition to fostering advancements in space capabilities, the project has markedly enhanced participants' understanding, enabling facility and capability providers to grasp industry needs more profoundly and industry stakeholders to appreciate the scientific rationale behind their requirements.

This paper aims to illuminate how these collaborations under the Space Infrastructure Fund have driven innovation, reduced barriers to entry, and opened new avenues in both traditional and emerging space sectors. We will explore how the project's alignment with public and private entities has catalysed technological advancements, enhanced Australia's competitive edge in the space market, and laid a foundation for future growth. Through this exploration, the paper seeks to contribute to the understanding of the transformative power of PPPs in the space industry, highlighting lessons learned and insights gained from the Australian experience. This discussion is particularly relevant for countries and organizations looking to leverage PPPs as a vehicle for advancing their space capabilities and achieving broader economic and technological objectives.