

34th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
Economics of Procurement in Space Contracting (6)

Author: Ms. Alyssa Frayling
know.space, United Kingdom, alyssa.frayling@hotmail.co.uk

Mr. Will Lecky
know.space, United Kingdom, will@know.space

Mr. Greg Sadlier
United Kingdom, greg@know.space

STIMULATING NATIONAL PRIVATE SECTOR GROWTH IN EMERGING SPACE NATIONS

Abstract

In contrast to established space nations, who can utilize decades of experience, large talent pools and significant amounts of funding, emerging space nations must be more innovative with their approach to building a national space sector. An important element of their strategy can be to stimulate the private sector and growth of NewSpace actors, benefiting from new business models, the ability to leverage space infrastructure from established space nations, and avoiding legacy constraints.

How emerging space nations have addressed the private sector varies greatly from country to country. Not all have gone down the expected route of simply encouraging downstream, application-based companies. For example, New Zealand has established itself as the only country with a fully-commercial spaceport for small vehicle launch. South Africa has sought to drive the country's geospatial readiness and downstream sector through the Space-Tech Challenge, aiming to provide online incubation and virtual mentorship to local innovators, entrepreneurs, and early-stage tech startups. Meanwhile, Singapore's status as a business-friendly, high tech financial hub has sparked organic growth of a diverse private space tech industry.

There is no single, simple solution to stimulating private sector growth within an emerging space nation, especially as the strategy varies depending on which areas of the value chain are to be developed.

In this paper we aim to explore different innovative strategies for emerging space nations to engage with the private sector and encourage local growth, providing insight on successful strategies along the value chain, as well as exploring the roles different actors can play in developing the sector.

First, we will outline benefits of private sector growth for emerging nations, the impact it can have on industries and local regions, and the importance of its role in supporting a country's overall space sector. We will then compare and analyse different strategic and innovative ways emerging space nations have engaged with their private sector, providing case studies on countries such as Singapore, New Zealand, South Africa and Luxembourg, as well as identifying barriers that were necessary to overcome. Finally, based on Case Study outcomes, we will outline approaches and 'lessons learned' for stimulating private sector growth, including how to engage with actors from space manufacturing and operations, to applications and ancillary services. This will elaborate potential roles different actors play in establishing a successful private sector, including the public sector (regulation, policy, procurement, funding, etc.), venture capitalists and angel investors, and international organizations.