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Author: Mr. Eamon Lawson Australia, eamon.lawson@southernlaunch.space

A COMPREHENSIVE APPROACH TO SPECTRUM ALLOCATION FOR DOMESTIC SPACE LAUNCH IN AUSTRALIA: INTERNATIONAL PERSPECTIVES ON LICENSING LAUNCH VEHICLE TRANSMISSIONS

Abstract

Australia's space industry has established itself as a key player in the satellite market and amendments to regulatory framework governing radiofrequency allocations have improved support for communications with in-orbit satellites. However, the current framework fails to support the new generation of launch vehicles that takes these satellites to orbit from Australian shores. This paper explores the limitations of Australia's current regulatory framework and its impact on the development of a domestic space launch industry.

The paper begins by outlining the current framework for spectrum licensing in Australia and highlights the challenges faced by the space launch industry. The framework, which has historically prioritized the protection of entrenched users, does not extend that same level of newfound support to transmissions during domestic launches as it does to communications with in-orbit satellites.

The paper then examines the international domestic regulatory frameworks governing spectrum allocation for launch vehicle transmissions in other jurisdictions, including the United States and Europe. The comparison of regulatory frameworks reveals significant differences in the level of support provided to launch vehicle operations.

The paper concluded by recommending changes to the current regulatory framework in Australia to introduce mechanisms in play internationally that would provide a more comprehensive and supportive regulatory environment for both launch vehicle and satellite communications.