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STEERING SPACE ACTIVITIES FOR GLOBAL BENEFITS: A CRITICAL STUDY OF THE
ASIA-PACIFIC FRAMEWORK FOR PROSPECTIVE SPACE DEVELOPMENT

Abstract

It is well recognised that space technologies and applications have the potential to realise benefits at a global scale. However, in order to accelerate the realisation of such benefits especially through international cooperation, policy-makers and market players alike require an understanding of the drivers and motivations underlying space activities. An analysis in this field of study would take into account state-driven policies as well as the complexity, and opportunity, associated with the surge of activities involving private entities. On this premise, this paper will propose a framework through which to analyse and anticipate the space development approaches taken, or to be taken in this decade, building on the observation and analysis derived by space activities in Asia-Pacific.

The choice of focusing on the Asia-Pacific region is twofold: first, the region is home to a diverse group of pre-emerging, emerging and established space-faring states; secondly, at the same time, Asia-Pacific is considerably interconnected in discourse and exchange. As such, Asia-Pacific is akin to a microcosm of the world, and a study of the region is fruitful for anticipating trends globally.

The framework posits that there are three main space development approaches, which are characterised by: first, national government-driven programmes where investments into hardware development and infrastructure are mainly made and owned by governments, which may transfer capabilities to industry; secondly, programmes where agencies act as users and space technology is considered a tool; and thirdly, programmes which feature open start-up and corporate innovation, privately-driven initiatives involving space business areas and the profit motive.

It is recognised that countries, being complex ecosystems which evolve quickly, do not fall neatly into these theoretical categories all the time – however, the logical framework of these three main space development approaches may give observers a lens through which to understand the drivers of space activities and anticipate trends and behaviour.

The paper will perform a comparative analysis, applying the framework to pre-emerging, emerging and established space-faring states in Asia-Pacific, thus presenting prospective space development. Furthermore, the paper will critically examine how the study of policy logics can complement the framework and improve understanding of the drivers/motivations of space activities.

It is hoped that the framework proposed in this paper may offer considerations on how to guide the surge of space activities towards contribution to the global community in line with the “Space2030” Agenda, thus actively responding to the UN SDGs.