

BUSINESS INNOVATION SYMPOSIUM (E6)

New space at the national, international, and overall industry levels: innovation, entrepreneurship & investment at the macroscopic level of analysis (3)

Author: Mr. William Barrett

Asia Pacific Aerospace Consultants Pty Ltd, Australia

Mr. Kirby Ikin

Asia Pacific Aerospace Consultants Pty Ltd, Australia

THE TRANSFORMATION OF SPACE IN THE 21ST CENTURY AND ANALYSIS OF AUSTRALIAN SPACE CAPABILITIES**Abstract**

Since the advent of the 21st Century the global space economy has undergone a tremendous transformation driven by the dramatic growth of commercial space activities. This transformation and its implications for the future space economy are not widely recognised by government policy makers, the business and investment community, the public at large and even by some within the space community.

This presentation is based on a series of studies of Australian space capabilities conducted by the authors on behalf of the Australian Government (the most recent "A Selective Review of Australian Space Capabilities" released in 2016) combined with additional analysis for IAC 2017. The presentation identifies and analyses three separate stages of global space economy development and highlights the changing roles of government and industry within these stages. It demonstrates how the third and current stage of development commenced around the turn of the 21st Century building on the progress of the previous stages to launch the commercial transformation of the space sector. The presentation highlights the key drivers of this global growth, the trends in the type of activity taking place and the significant shifts in the global markets accessed by space services. The findings show that many current services did not exist prior to the turn of the century and how these new innovations are not only driving space economy growth but transforming space services into an essential element of the modern global economy such that space assets and activities are increasingly recognised as critical infrastructure underpinning our modern society.

The presentation then analyses these global space trends in the context of the Australian space economy. It provides findings on the overall size and demographics of the Australian space economy and highlights the key space capabilities within Australia, evidence which indicates that the Australian space sector is larger and more capable than generally recognised. It demonstrates the importance of the space industry to the Australian economy and identifies some high level trends providing insight into the future for Australian space activities.