

SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND
DEVELOPMENT (D3)Strategies & Architectures as the Framework for Future Building Blocks in Space Exploration and
Development (1)

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A COMMON FRAMEWORK FOR CONTEXTUALIZING SPACE EXPLORATION STRATEGIES

Abstract

From the 2013 renewal of NASA's authorization to the evolving position of the U.S. president on the direction of space policy, this year has been full of dramatic shifts in the direction of the U.S. civil space enterprise. Added to this is the growth of private-sector efforts to undertake space exploration activities previously carried out only by governments. A primary challenge for decision-makers in the United States and around the world will be developing an integrative framework to compare and contrast these alternatives against each other. Without a common descriptive framework with which to value benefits, it is difficult to apply traditional tools of policy analysis, such as cost-benefit analysis. Absent this ability to choose, space exploration will find itself unable to move beyond the paradigm that has kept humanity restricted to Low Earth Orbit for more than 80% of most recent portion of the spacefaring era. This paper will discuss solutions to finding a common way to evaluate differing strategies for space exploration.