

IAF SPACE EXPLORATION SYMPOSIUM (A3)
Space Exploration Overview (1)

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PROSPECTS FOR SPACE EXPLORATION: TOWARDS A NEW ERA OF COLLABORATION AND
COMPETITION**Abstract**

Space exploration is gaining increasing momentum as it cements itself as a field of high strategic importance for governments around the world. Global government investment in space exploration totaled nearly \$25 Billion in 2021 increasing at a 5% compound annual growth rate over the past five years. The global vision in space exploration is currently focused on establishing a sustainable presence on and around the Moon. Lunar exploration, therefore, has become a central item in the exploration strategy of most space agencies around the world. Numerous initiatives - such as the NASA-led Artemis programme and the Russian-Chinese International Lunar Research Station (ILRS) project - have started to materialise. At the same time as pursuing initiatives in cislunar space and beyond, leading space agencies also agree on the importance of maintaining a sustainable presence in LEO.

At an international level, cooperation between countries remains highly driven by geopolitical interests, establishing new prospects for partnerships between allied countries, while also creating an era of competition among others. In addition, with the growing private sector participation to space exploration, governments and space agencies are increasingly seeking to leverage public-private partnerships to achieve their goals in a cost-effective and sustainable manner. While there is a growing interest and significant potential commercial opportunity, there remain numerous interrelated challenges to overcome.

This presentation will provide a strategic and economic overview of the current space exploration sector. It will review the key trends and drivers in space exploration looking forward, spotlight the key commercial and government organizations, emerging players, and include an analysis of government investments by application. It will also discuss the key challenges and enablers for space exploration activities. The presentation builds on Euroconsult's research report Prospects for Space Exploration 3rd Edition to be published in Q3 2022.