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IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Emerging Global Space Ventures (9-D6.2)

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EXPLORING INSIGHTS FROM EMERGING SPACE AGENCIES

Abstract

Since the turn of the century, technological innovation and reduced launch costs have lowered many conventional barriers of entry to space, giving way to a more diversified space-faring community. From commercial companies and civil space organizations to military space programs and partnerships between all three, more nations are benefiting from the use of outer space than ever before. In the past six years alone, thirteen nations established national civil space agencies for the first time. While there are benefits to establishing a new space agency in this more expansive "new space age," developing space nations face new and unique challenges associated with a more congested, competitive, and contested space environment.

With the goal of providing practical knowledge for emerging space nations to develop successful strategies, this paper reviews best practices and lessons learned in the formation of national civil space agencies established between 2014 and 2019, including the rationales for their creation, their accomplishments, their goals for the future, and the challenges they have faced. In particular, this study's findings focus on two in-depth case study profiles of the United Arab Emirates Space Agency (UAESA) and the Luxembourg Space Agency (LSA), placed in the context of a broader overview of emerging space nations. Our findings will contribute to public understanding around new priorities and challenges for the future of space, inform developing mechanisms for space governance, and help emerging space nations develop frameworks and strategies for the successful development of a national civil space program. This investigation was conducted as part of an International Review Board-approved research study composed of both a comprehensive literature review and qualitative interview sessions with representatives from the UAESA and LSA. The study was completed as part of the Space Policy Institute's Graduate capstone program at George Washington University in Washington, D.C.