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16th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND DEVELOPMENT (D3)

Space Technology and System Management Practices and Tools (4)

Author: Mr. Khaled Al Hashmi UAE Space Agency, United Arab Emirates, k.alhashmi@space.gov.ae

TOWARDS UAE'S SPACE SCIENCE, TECHNOLOGY AND INNOVATION ROADMAP

Abstract

This research work ultimately aims to present preliminary work that will be used towards the development of the first UAE's Science, Technology and Innovation (STI) Roadmap for its space sector. The analysis was based on secondary and primary data collection. Secondary data includes journals, market reports, technology roadmaps from various sources, and/or strategies of space agencies, were then analyzed to understand the different STI areas being invested by the respective country. Primary data collection was conducted by two empirical studies, a survey and a workshop, to collect data from local academia, satellite operators and aerospace manufacturing firms regarding existing research and development capabilities in space science and technology and future interests. The results from quantitative and qualitative analyses indicate that the UAE needs capitalize on opportunities related to and follow the roadmaps that are driving the cutting edge research and at the same time developing local research capabilities in technologies that has national interests and not necessary at cutting edge, rather than roadmaps that are in some ways "following" higher-tier agencies. Other smaller size developing countries entering into space sector could benefit from the proposed methodology. Keywords: Technology Roadmap, Research and Development, STI