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Is Space R&D Truly Fostering A Better World For Our Future? (2)

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PRACTICES IN FORESIGHT & SCENARIO BUILDING HELPING SPACE AGENCIES PREPARE
FOR & SEIZE FUTURE OPPORTUNITIES

Abstract

Practices in foresight and scenario building roughly translate to postulating possible and probable futures by systematic and pattern-based understanding of past and present, and determining the likelihood of future events and trends. Today, space agencies and public institutions in general are witnessing technological, industrial and societal developments to which they are often adapting and finding solutions ex-post facto.

In view of the authors, programmes and activities undertaken by public institutions should rather be designed with the help of foresight-building tools and techniques. Integrating these tools enables enhanced identification of probable future trends and gives decision makers a holistic oversight on the matter, hopefully resulting in better informed decisions and a better return on public investment.

The paper follows the steps undertaken in developing a space-adapted foresight tool which facilitates programmatic development of space agencies, policymakers and the space community at large. Tackling today's issues by applying today's solutions in a deterministic way without leeway for modularity, adaptation and organic development can result in missed opportunities and partial solutions to evolved challenges.

Furthermore these activities aim to develop a foresight based culture which permeates the organization without the (long-term) need for a specific task-force or office, but rather supporting a heterogeneous network of initiatives that involve foresight techniques by default rather than by hierarchical decision.

Strategy and policymaking in the 21st century should be empowered with new techniques (foresight, informatization, democratization) as this bolsters the resilience of strategies and programmes and ensures their relevance in the long-run. Moreover, the foresight approach, is also unique in the sense that it creates a compelling narrative by design, which supports communication and outreach activities once the activity is put into place.

The paper will ultimately serve as a valuable resource to identify opportunities and challenges for foresight tools tailored to fit the needs of the space sector at large.