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THE IMPORTANCE OF MONITORING & EVALUATION OF TODAY'S SPACE ACTIVITIES FOR TOMORROW'S SPACE INVESTMENTS

Abstract

With ever-constrained public and private finances, the space industry needs to demonstrate its value to compete with other budgetary priorities. Space organisations also have a duty of accountability to those that fund their activities, i.e. taxpayers, investors, and shareholders. Beyond financial considerations, there is a broader imperative to allocate resources optimally to effectively address pressing global, national and regional challenges such as climate change.

The impact from investments in space is wide-ranging, from the creation of high-skilled jobs, revenue and new partnerships to the development of cutting-edge science, innovative technologies and applications. Space activities can also lead to benefits that are harder to capture, such as increases in reputation and competitiveness, and spillovers into other sectors through knowledge and technology transfers. Today, space is critical for the delivery of essential services across industries.

However, impacts from space investments tend to take longer to materialise than in other sectors, which can lead to the prioritisation of short-term objectives. This undermines the potential magnitude of impacts achievable from space endeavours. Therefore, developing a robust evidence base is crucial for supporting evidence-based decision-making by government, industry, and academia.

This paper explores the value of Monitoring & Evaluation in understanding returns on space investments to inform better decision-making by public and private stakeholders, helping secure increasing space budgets to sustain capabilities, maintain competitiveness, fulfil growing ambitions, and tackle societal sustainability challenges.

First, we will explore the range of possible impacts stemming from investments in space activities, outlining options on how these might be measured, including data requirements. We will then examine the extent to which ex post assessments can meet those data requirements, highlighting potential availability and quality issues (e.g. lack of / incomplete / unreliable data, control group identification challenges) which may limit the depth of analysis possible. Finally, we will explore how a proactive ex ante Monitoring & Evaluation approach allows the definition of a clear protocol for the collection of the quantitative and qualitative data required to enable the most robust analytical techniques, like econometrics. It also facilitates the identification of lessons learned, improving the delivery of future activities.

This paper will show that robust Monitoring & Evaluation evidence can improve decision-makers' understanding of the specificities and value of investment in space, helping make the case for increased funding, improve the design and delivery of space activities, overall supporting the long-term growth of the sector and contributing to addressing societal challenges.