

IAF SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
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ESA SPACE SOLUTIONS: SOCIO-ECONOMIC IMPACT ANALYSIS OF NEWSPACE - ABSTRACT

Abstract

The Socio-Economic Impact [SEI] analysis measures the impact delivered by ESA Space Solutions and its purpose is to provide ESA Participating States and the general public transparent measures of their return on investment by using an established set of socio-economic parameters. ESA Space Solutions SEI analysis, published every year, highlighted in 2019 a steep positive trend from over 1,700 number of its case studies and projects. Results are eloquent and demonstrate a rapid acceleration in the NEWSPACE economy: every million euro invested through ESA Space Solutions generates 2.8 M of third party investment, 3.6 M of revenues (about 50). Notably, ESA Space Solutions SME engagement increased eightfold over the last nine years, moving from less than 20 to more than 160 per year: SMEs represent about 70% of the total. SEI impact analysis is delivered from information submitted by the companies: SEI questionnaires submitted by ESA Space Solutions contractors as well as information gathered from ESA internal and other public sources. The data collection targets 10 socio-economic indicators displayed here on 3 categories: Financial: Revenue, Jobs, Exports, Investment Leverage, Addressable Market Innovation; Intellectual Capital: Market Product Innovation, Patents and Record of Invention; Societal Benefits: Network Societal Capital, Extent of Value Chain, Value Creation. On top of the data collection, additional features enriching the SEI analysis are: · Data science visualisations corroborating the ESA Space Solutions global reach. · Productivity of ESA Space Solutions portfolio companies, intended as the ratio Output per Number of employees. · Network Capital, rendered through specialised network visualisations highlighting new major space-related competence clusters. · Last and not least, Societal Capital is a first attempt to quantify the social impact based on a selected number of Sustainable Development Goals (SDGs).