

27th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)

The space economy: what are the socio-economic impacts? (3)

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MEASURING THE SOCIO-ECONOMIC IMPACTS OF ITALY'S SPACE SECTOR ACTIVITIES -
ASI'S WEB PANEL AND ITS YEARLY INDEXES FOR MONITORING THE DRIVE TOWARD THE
MARKET AND THE GROUND USERS - THE CASES OF AERONAUTICS AND SOFTWARE
PRODUCTION

Abstract

Dating from 2010, the Italian Space Agency's (ASI) web portal "Distretto Virtuale" is hosting a highly meaningful panel (representing more than 90% of the national sector's activities) composed of about 60 subjects, including all of the large enterprises, most of the SMEs and a good number of research entities.

The panel members directly provide yearly data about their activities (turnover, RD activities, employees) through a confidential web form. Several in-built automatic reports are available for the results, and not only on the general trends above, but also on a series of indexes aimed at monitoring the hoped for strategic shift towards a more market and ground users' oriented sector: the ratio between Downstream and Upstream turnover, the ratio between public and private demand, international competitiveness (especially outside the EU), the SMEs performance, which is itself a positive indicator, the RD activities trends toward the turnover, job creation and productivity. A dedicated Working Group, extended to participants from other public Entities and Universities interested in the space sector, is supporting and facilitating the data collection and analysis.

Finally, starting from the abovesaid general data, a model evaluation process, based on site visits and interviews for additional data collection, has been tested to verify over the 2010-12 period, the higher than average indexes of space sub-sectors having operations overlapping those of wide non space sectors. The case studies have been those of space derived applications for aeronautics and for software production. In both cases these overlaps, and their corresponding RD effort, prove to be an effective driver of business development, employment and productivity increase within a number of panel enterprises. The specific examples of services and products entering into use for aeronautics and software production (aircraft flight sensors, new radar technologies, satellite based innovative ATM technologies, image treatment software for multiple usages, etc.) offer a further insight into the effects, outside of the space sector, in terms of job creation, cost savings, productivity, etc.

This model evaluation process could be repeated for any space sub-sector and be even easier to apply where it is not a cross-cutting one, but rather one corresponding to the turnover breakdown categories existing within the web panel application. Any "downstream" subsector could be the next case; let's only consider the increasing range of satellite based ground services for agriculture, telemedicine and healthcare, sea and land transportation, environmental protection, etc.