

European Space Economy Thematic Account

Assessing the economic impact of the space industry in Europe





The project

The European Space Economy Thematic Account (ESETA) project aims to provide macroeconomic statistics for the EU space sector. It will facilitate a wide range of new analyses, and enhance the understanding of the space sector's contribution to the overall economy in Europe.

In line with the European Statistical System (ESS) Innovation Agenda, the project aims to develop a thematic account for the European space activities and products. The production of space-relevant goods and services will be traced, and their economic effects quantified.

The project also addresses the need to monitor the outcomes of public investments in the space economy.



The motivation

The main goals of the ESETA project are to provide a comprehensive view of the space sector in terms of size and value, and to clarify the sector's role in the economy by examining both supply (producers) and demand (consumers).

Given the relatively small and dispersed nature of the space economy, its products are spread across various economic activities. A clear definition of the space economy in the form of a list of statistical codes is consequently needed.

The ESETA will then enable the measurement and monitoring of the direct and indirect contributions of the spacerelated industries to the European Gross Domestic Product (GDP) and employment, using official statistics. It will also provide insights into the economic and social benefits of the space economy and its global value chains.







The methodology

The project uses the supply and use framework and the FIGARO tables (EU inter-country supply, use and input-output tables (SUIOTs)).

The supply and use framework allows for the estimation of many types of economic effects related to production. It gives a more comprehensive view than reports that only measure revenue. It can be used to identify the value of output, value added, employment and compensation along the entire production supply chain.

SUIOTs provide a detailed accounting of all the goods and services that are produced and consumed in a country (national tables), or in a region (for inter-country tables). Relationships from the SUIOTs can be used to analyse different types of economic impacts including direct, indirect and induced effects across industries, as well as across countries for inter-country tables.

The project builds on similar initiatives in the United States and other thematic accounts. It involves developing a methodology and a clear definition of the space economy, including a detailed list of statistical codes for space-relevant products and industries

(codes from the classification of products by activity (CPA) and statistical classification of economic activities (NACE)).

In December 2023, the first results were released on the Eurostat website, including an Excel file with export and import data related to spacecraft and spacecraft launch vehicles. Two copublications were also disseminated:

- the first-ever list of statistical codes to measure the space economy consistent across the three geographical levels: the world, the United States and Europe;
- a harmonised approach for generating reliable space economic statistics.

The project is progressing, focusing on the statistical codes identified as 100% space-related (e.g. space transport, satellite communication activities, manufacture of spacecraft and related machinery). In a second stage, the use of microeconomic information available in National Statistical Institutes is being explored, particularly data on the production of manufactured goods by enterprises (Prodcom) and data for structural business statistics.



The team

Project Owner: Eurostat Unit C.5 - Directors of macroeconomic statistics (DMES) - Integrated Global Accounts Expert Group (IGA EG).

Member States involved: All EU Member States have been invited to participate in the project.

External partners / researchers involved: Responsible partners are the European Commission Joint Research Centre (JRC), the European Space Agency (ESA), the Directorate-General for Defence Industry and Space (DEFIS), and the EU Agency for the Space Programme (EUSPA); Consulted partners are Eurospace, the Organisation for Economic Co-operation and Development (OECD) and the United States Bureau of Economic Analysis (US BEA).

Contact:

ESTAT-IGA@ec.europa.eu

Technologies and methodologies involved: National Accounts, supply and use tables and thematic accounts.



The timeline

- Project initiation: 2023
- Estimated time to deliver impact: Long term



More information

<u>European space economy thematic account</u> - Experimental statistics

<u>How to measure the European space economy</u> - European Commission (europa.eu)

US BEA - Space economy

