

Rome, December 9th, 2025

TOWARDS A THEMATIC ACCOUNT OF THE SPACE ECONOMY IN ITALY

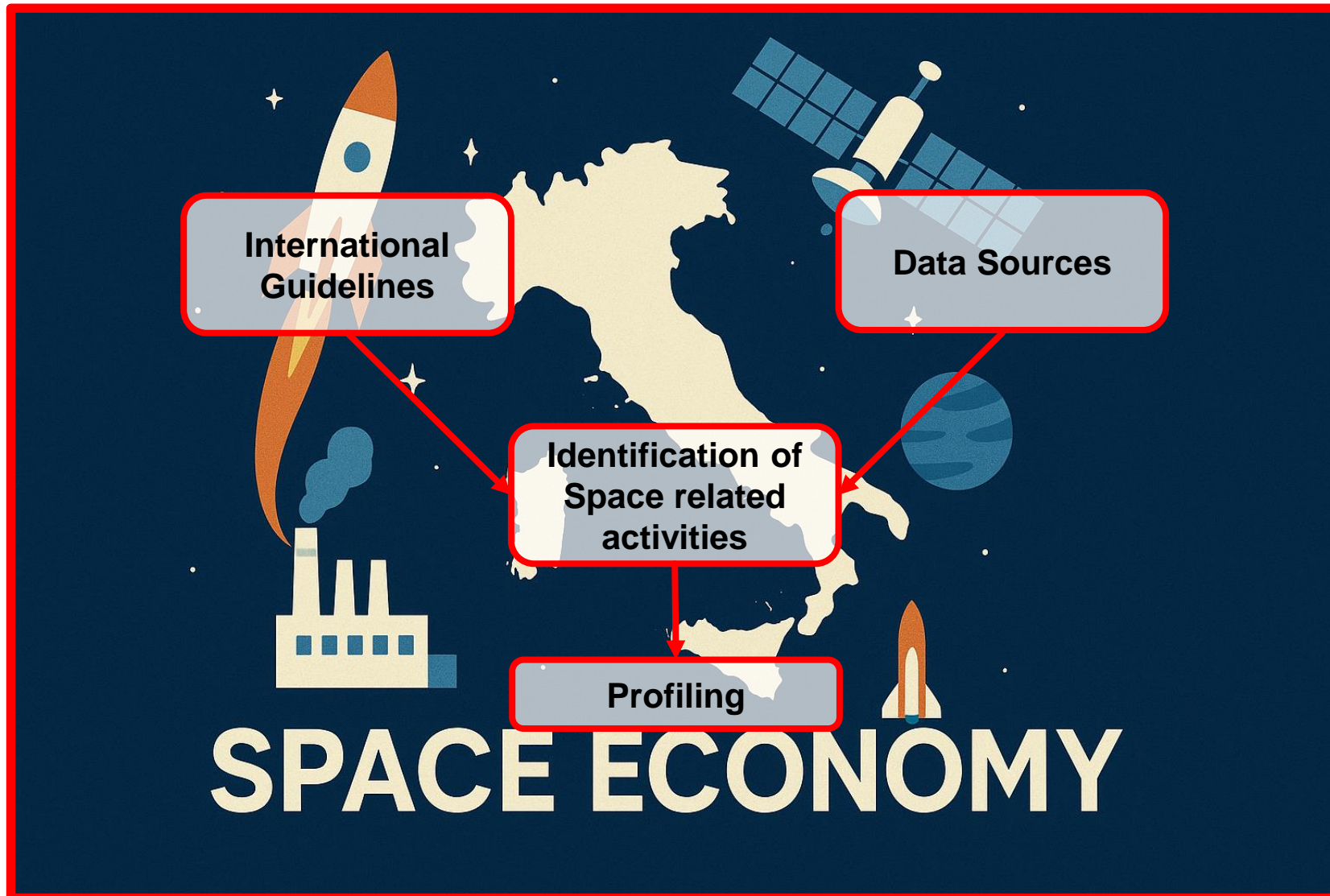
METHODOLOGY AND FIRST EVIDENCES

DATA SOURCES AND METHODS FOR MEASURING THE SPACE ECONOMY

EMANUELE PALLOTTI

Istat | Directorate of National Accounts

Outline



Scope and classifications of the space economy

- Using definitions from *OECD's Handbook on Measuring the Space Economy* and *Eurostat's Developing a space economy account for Europe*, business units are classified based on their involvement in the space economy value chain, distinguishing among:

Upstream

Activities producing goods and services that are used in space or directly support their production

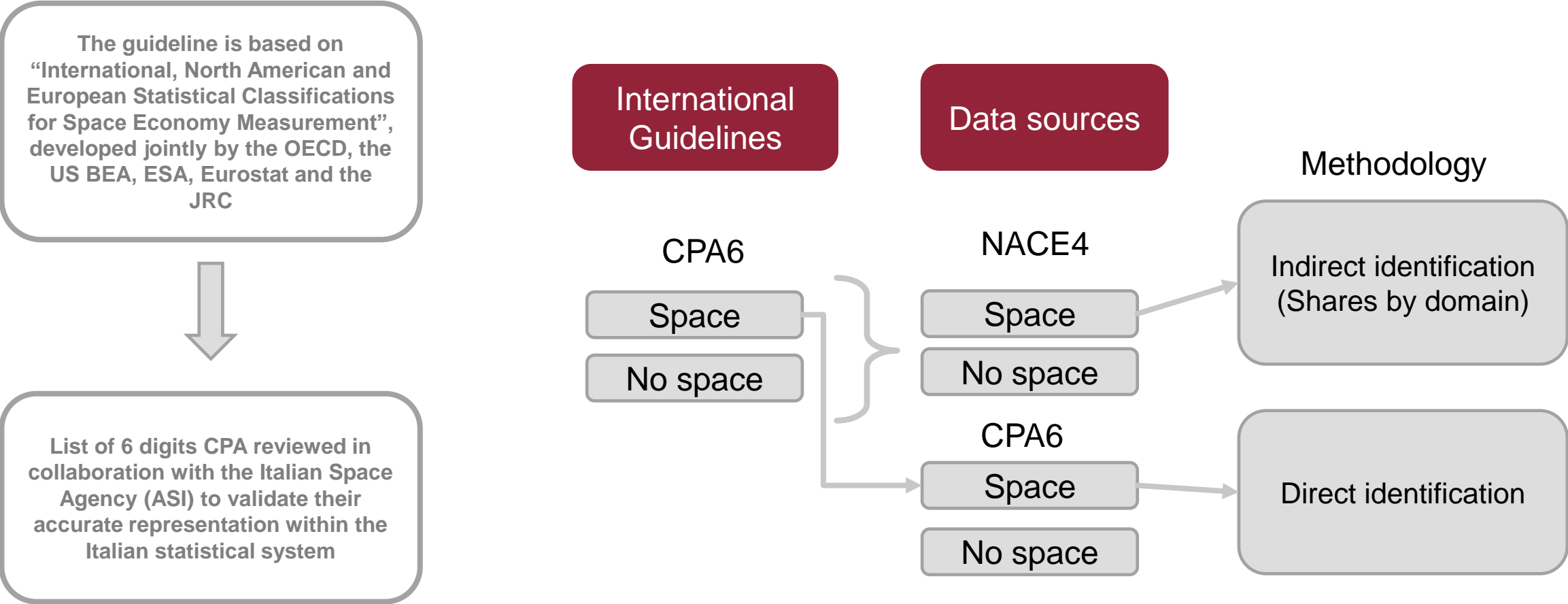
Downstream

Activities that use upstream goods and services as necessary input for (at least part of) their production processes

Space-derived

Activities that use upstream goods and services as non necessary input for (at least part of) their production processes

Overview of data sources and methodology



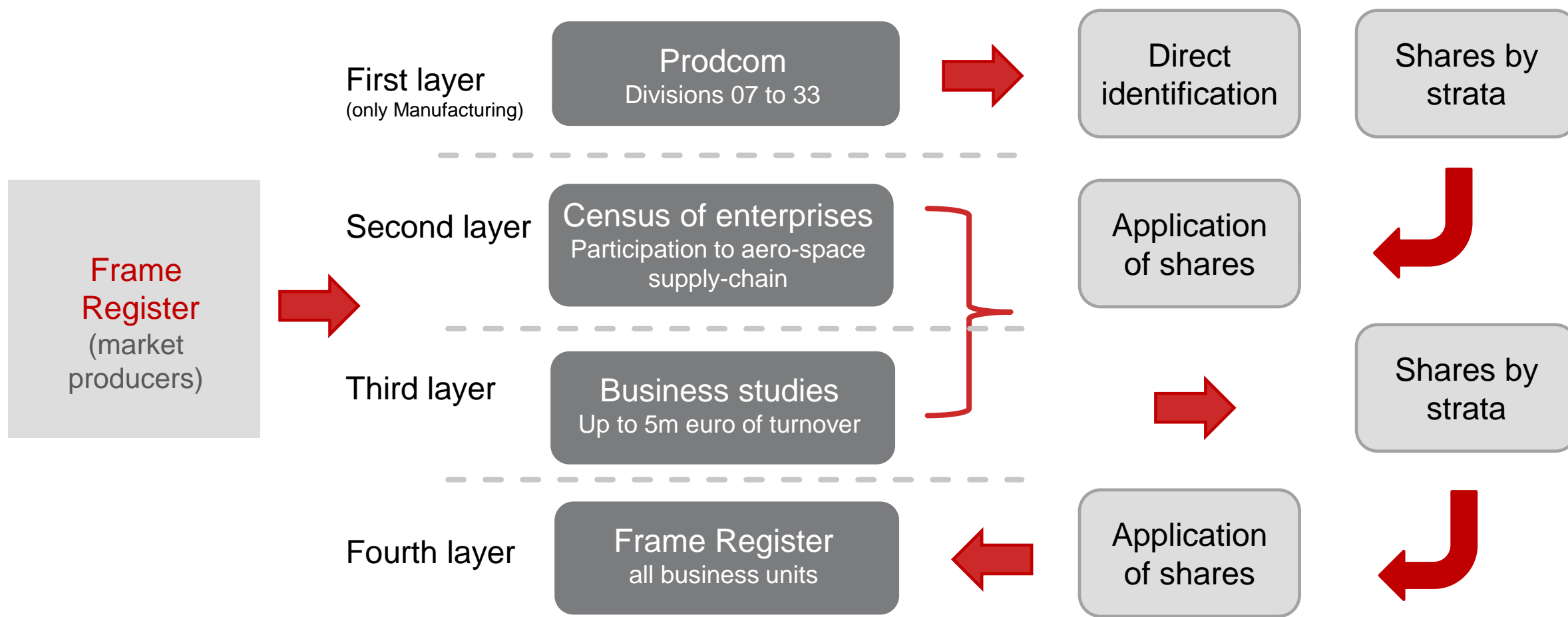
Data Sources



Methodology | Overview

- The definition of space-related activities of (market and non-market) producers follows a bottom-up approach exploiting available microdata;
- The complexity of identification and the limited information call for a sequential identification strategy, different sources of information are used in different steps to allow the better identification of space-related activities
- For **market producers** the procedure is composed of two steps:
 - Decision tree algorithm to define space-related share of activities for each producer based on available microdata (different for manufacturing and other industries)
 - Profiling of business units (three layers: “Signal from Strong Sources”, “ASI list”, “Exports of space-products”)
- For **non-market producers**, space-related activities have been identified based on ASI/ESA funding and based on the main activity of the producer within the S13 list

Methodology | Decision tree algorithm



Methodology | Profiling

- Noise may be introduced along the last step of the decision tree algorithm, as it may assign space-related shares to firms that are not actually involved in the space industry.
- To address these possible false positives, firms are verified through a profiling process that relies on three levels:

Strong Sources

Business units identified by the strong sources (Prodcom, Census, and ISA)

ASI list

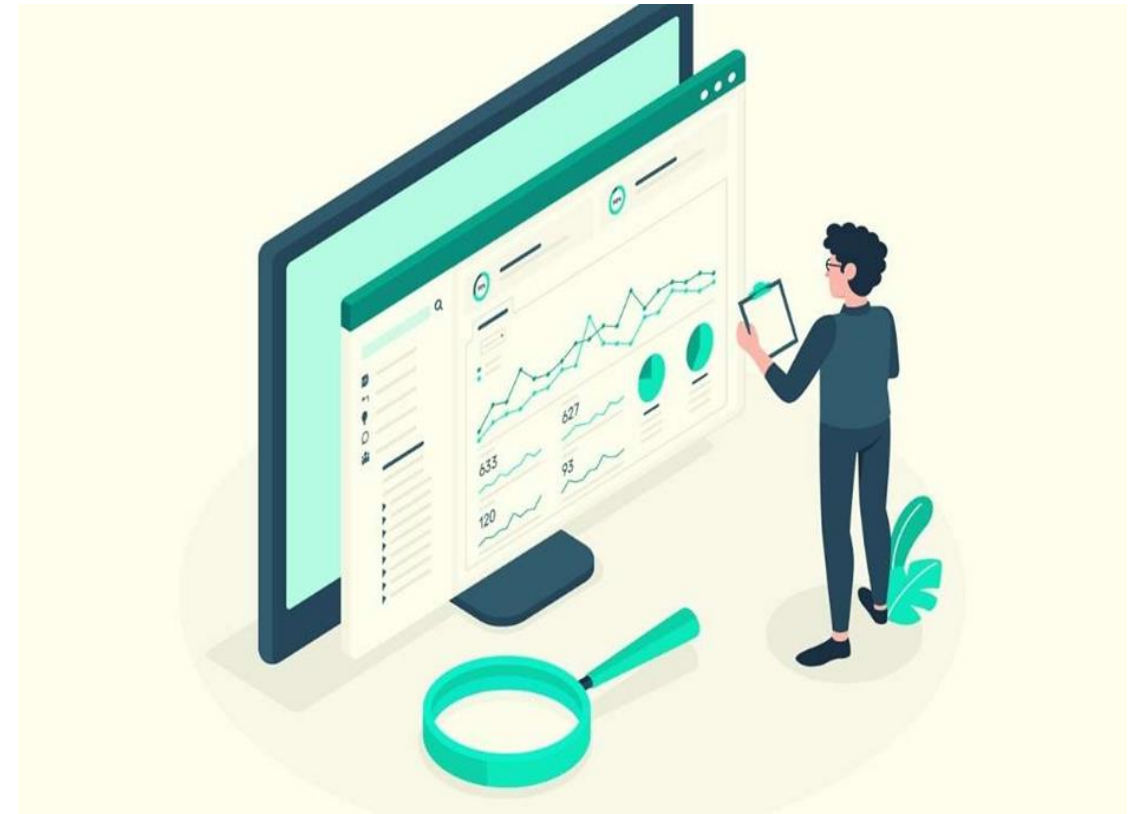
Business units on the ASI list

COE Data

Business units that export space-related goods at NC8 level

From data sources to the outcome

- National Accounts framework benefits from a large volume of microdata, coming from surveys and administrative records, which cover a large strand of informative needs.
- This granularity of information allows for micro-founding the extension of National Accounts to measure the contribution of the space economy and stress the characteristics of “space-related” firms across a set of dimension of analysis:
 - Sectoral
 - Size-class
 - Governance settings
 - Geography



Thank you.

EMANUELE PALLOTTI | emanuele.pallotti@istat.it