

**EUROPEAN UNION** 

### **#EUSpace**

# IN-ORBIT DEMONSTRATION AND VALIDATION

Being able to demonstrate innovative technologies and operational concepts in space is key to enable the use of space data for scientific, public, or commercial purposes.

The IOD/IOV programme fosters the competitiveness of the EU space ecosystem as it allows academia, research organisations, SMEs and larger industrial companies to effectively test new technologies in orbit. In providing **flight heritage**, it gives a major boost to innovations and accelerates their time to market.

Through the IOD/IOV services, the European Commission supports start-ups, as part of the CASSINI initiative, whilst fostering **scientific excellence** for universities and research institutes. It also contributes to the **EU space skills agenda** by exposing students to activities required for designing, building, testing, integrating, and operating a satellite.

#### IOD/IOV SERVICES

- Aggregation services for experiments that need to be aggregated on a satellite;
- Launch services for aggregated missions and for "Ready to Fly" Satellites;
- 3. Up to one year of **operations** for aggregated missions.

## VV23 – One launch, 3 missions, 6 satellites, 9 experiments:

### **READY TO FLY SATELLITES**

**ESTCube-2:** provided by a group of students from University of Tartu, Estonia.

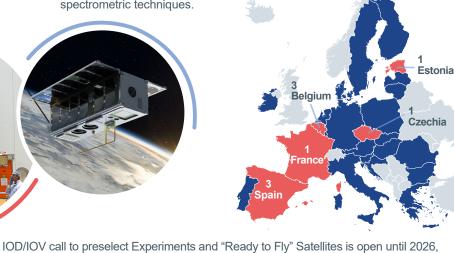
This mission consists of a 3U cubesat to demonstrate de-orbiting with plasma brake technology and qualify a deep-space nanospacecraft platform for future missions that will use the electric solar wind sail. **ANSER:** provided by the Spanish research organisation INTA.

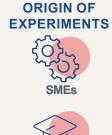
This mission consists of a cluster of 3X3U cubesats that will fly in formation, with the objective to study and monitor the water quality of the reserves of the Iberian Peninsula by means of spectrometric techniques.

### AGGREGATED MISSIONS

**SYNDEO** is the first ever IOD/IOV mission composed of a set of 2 X 6U CubeSats (Syndeo – 1 and Syndeo – 2) implemented by ISISpace (NL), that regroups a total of **7 experiments**.

#### 9 EXPERIMENTS ACROSS THE EU





Academia



#### © European Union, 2023

Reuse of this document is allowed, provided appropriate credit is given and any changes are indicated (Creative Commons Attribution 4.0 International license). For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

next cut off date: March 15th 2024. Check out the call for proposals