

## **IRIDE: the team is complete!**

Today, 12 April 2023, the presentation of IRIDE, one of Europe's most important Earth Observation satellite space programmes, was held at ESA ESRIN in the presence of Adolfo Urso, Italian Minister of Enterprise and Made in Italy, Simonetta Cheli, Director of ESA Earth Observation Programmes and Head of ESRIN, Roberto Formaro Director of Programmes of the Italian Space Agency (ASI), and Guido Levrini ESA IRIDE Programme Manager.

In December 2021, the Italian Government entrusted ESA with the challenging task of developing the IRIDE system. ESA has achieved the first of the PNRR programmatic objectives, namely the awarding of all contracts by the deadline of 31 March 2023. The programme has an overall budget of approximately 1.1 billion euros and will be completed by mid 2026.

The Italian industrial space sector has taken part in the project with over 47 companies, who will build the system and offer services to users. The participation of over 10 public entities is also significant, representing approximately 23% of the Italian surface area, 37% of the population, 33% of the national GDP, all of whom will use the data that IRIDE will make available in the coming years.

## **IRIDE**

IRIDE, one of Europe's most important Earth Observation satellite space programmes, will be implemented in Italy at the initiative of Italian Government thanks to PNRR (Recovery and Resilience Plan) resources and completed by 2026, under the management of ESA – European Space Agency and with the support of the Italian Space Agency (ASI). The constellation, along with other national and European space systems, is designed to serve public administrations, and many others, to combat hydrogeological instability and fires, protect coastlines, monitor critical infrastructure, air quality and weather conditions. Lastly, it will provide analytical data for the development of commercial applications by startups, small and medium-sized enterprises, and sector industries.

IRIDE is an end-to-end system composed of constellations of LEO satellites (Upstream Segment), the ground-based Operations infrastructure (Downstream Segment) and the Services to be delivered to the Italian public administration (Service Segment).

The IRIDE Constellation will be unique in its kind, being based on a number of different sensing techniques and sensing technologies, encompassing microwave imaging (by Synthetic Aperture Radars, SAR), optical imaging at various spatial resolutions (from high to medium resolution), and in different frequency ranges, from panchromatic, to multispectral, to hyperspectral, to near and thermal infrared bands.

Hence, IRIDE can be regarded as “a constellation of constellations”.