

# D-Orbit Launches the 17th Orbital Transportation Mission with ION Satellite Carrier

Wish Upon a Star launched aboard SpaceX's Transporter-13 from Vandenberg Space Force Base

**Fino Mornasco, Italy, March 15th, 2025** — On March 14th, 2025, <u>D-Orbit</u>, a leader in space logistics and orbital transportation, launched **Wish Upon a Star**, the **17th commercial mission** of its Orbital Transfer Vehicle (OTV), **ION Satellite Carrier (ION)**.

The OTV was launched aboard SpaceX's Transporter-13 mission at **23:43 PT (06:43 UTC - March 15<sup>th</sup>)** from the **Launch Complex 4 (SLC-4E) at Vandenberg Space Force Base in California.** One hour after liftoff, the ION vehicle, SCV Marvelous Mathias, was deployed into a 510-km Sun Synchronous Orbit.

"Wish Upon a Star is our third mission since the beginning of 2025, a year that is already marked by a steadily growing demand for in-orbit transportation services and a strong need for reliable and flexible solutions," said Matteo Andreas Lorenzoni, VP Commercial Strategy of D-Orbit. "Our commitment to our customers, new and recurring alike, is to keep working to make space safer and more accessible."

**ION Satellite Carrier** is a versatile space vehicle capable of **transporting and releasing satellites into distinct orbital slots**. It can also accommodate third-party payloads, including innovative technologies, research experiments, and instruments requiring **in-orbit testing**. Additionally, ION can support **edge computing and space cloud services**, providing satellite operators with advanced storage and computational capabilities in orbit.

D-Orbit's mission control team is now conducting the **Launch and Early Orbit Phase (LEOP)**, setting the stage for the upcoming operational phase.

#### Collaborating with new and recurring passengers

On this mission, ION hosts onboard several satellites and hosted payloads:

- H.E.R.M.E.S. (High Energy Rapid Modular Ensemble of Satellites) Pathfinder: a mission primarily financed by the Agenzia Spaziale italiana (ASI) with contributions from Istituto Nazionale di Astrofisica (INAF), Politecnico di Milano (POLIMI), Università degli Studi di Cagliari (UNICA) and the European Commission (EC). H.E.R.M.E.S. implements the revolutionary concept of distributed sensors in space, bringing in a new science era through the deployment of a pathfinder constellation of 6 CubeSats. Operating in triplets, the CubeSats will detect, localize and rapidly inform the scientific community about the occurrence of random astronomical events such as Gamma Rays Bursts (GRBs). The mission embarks an innovative miniaturized spectrometer, conceived and developed by INAF, on a 3U very agile platform designed, developed and tested by the PoliMi ASTRAlab. The constellation can continuously monitor almost the entire sky and can transfer within minutes the occurred cosmic events' coordinates to scientists thanks to its co-pointing capabilities, a continuous link with the Iridium constellation, a dedicated network of ground stations, the Scientific Operations Center and the Mission Operations Center, which are all implemented thanks to national ASI funding.
- DARK, by <u>Arkadia Space</u>: the first in-orbit demonstrator for Arkadia Space will demo two of Arkadia's 5 N Triton thrusters in orbital conditions. DARK is both a complete propulsion system and a miniature test center, capable of providing the propellant in adequate conditions, actuating and commanding the system's thrusters, and acquiring and measuring more than 60 telemetry channels while recording the data for on-ground analysis.



- Clustergate-1, by <u>DPhi Space</u>: the maiden flight of Clustergate, a shared hosted payload platform
  enabling easier and more affordable access to orbit. It carries six payloads from various commercial
  and academic institutions, all connected to the Phoenix onboard computer, designed to provide plugand-play integration and advanced edge processing in space. Additionally, Clustergate-1 hosts
  several software payloads, with the capability to onboard more during flight.
- GO-2 Propulsion System, by Morpheus Space: a high-performance solution designed to meet the
  rigorous demands of dynamic space missions. Leveraging FEEP technology, the GO-2 system
  delivers exceptional precision, efficiency, and reliability for missions requiring high-efficiency, lowthrust propulsion. Its scalable design makes it adaptable for a wide range of applications ranging from
  deorbit maneuvers, to thrust vectoring, to constellation management.
- AlbaPod 6P, by <u>Alba Orbital</u>: two deployers for 6P PocketQube satellites. PocketQubes, which are
  typically cube-shaped with 5 cm sides and a maximum mass of 250 grams, leverage commercial offthe-shelf components for electronics. AlbaPod 6P aims to provide a reliable deployment platform for
  these diminutive satellites, enhancing the scope of what can be achieved with small-scale space
  assets. The deployers will host a variety of PocketQubes, each with its own unique research
  objectives. On this mission, they will release HADES-ICM, HYDRA-W, UNICORN-2O, 2P & 2Q.
- Beyond Burials Shooting Star Memorial, by <u>Beyond Burials</u>: a symbolic payload that carries human remains on an orbital journey before re-entering Earth's atmosphere in a final celestial tribute.

ION SCV Marvelous Mathias will also host onboard a further payload from an undisclosed customer.

D-Orbit launched its first ION in September 2020. With this launch, the Company will have transported to space **more than 180 payloads** collectively.

# **About D-Orbit**

D-Orbit is a market leader in the space logistics and transportation services industry with a track record of space-proven services, technologies, and successful missions.

Founded in 2011, D-Orbit is the first company addressing the logistics needs of the space market. ION Satellite Carrier, for example, is a space vehicle that can transport satellites in orbit and release them individually into distinct orbital slots, reducing the time from launch to operations by up to 85% and the launch costs of an entire satellite constellation by up to 40%. ION can also accommodate multiple third-party payloads like innovative technologies developed by startups, experiments from research entities, and instruments from space companies requiring a test in orbit. Finally, ION can also be rented for edge computing applications and space cloud services to provide satellite operators with storage capacity and advanced computing capabilities in orbit. D-Orbit's roadmap includes becoming a relevant player in the in-orbit servicing market, which is forecasted to become one of the largest, growing markets within the space sector.

With offices in Italy, Portugal, the UK, and a new US team focused on bus design, manufacturing, and commercialization, D-Orbit is the world's first certified B-Corp space company and a registered benefit corporation.



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