

## Interstellar and D-Orbit to Enter a Framework Agreement for Launch Services - Achieves Milestone in Asian Space Transport



Hokkaido, Japan – Interstellar Technologies Inc. (hereinafter referred to as “Interstellar”), a comprehensive space infrastructure company committed to tackling global challenges through space transportation and utilization, is pleased to announce the signing of a Framework Agreement for Launch Services (hereinafter referred to as the “Agreement”) with D-Orbit S.p.A, an Italian venture specializing in small satellite logistics, headquartered in Fino Mornasco Como and led by CEO Luca Rossetini. This collaboration is expected to make a contribution to the supply of space transport services in the growing Asian space industry, alleviating potential bottlenecks that could hinder market expansion.

### Connecting Satellite Last mile delivery service for Affordable and Flexible Space Transport

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. With its multi-purpose ION Satellite Carrier orbital transfer vehicle, D-Orbit has now already successfully launched solutions across in-orbit transportation, payload hosting, space-based edge compute, space situational awareness and in-space communications.

Interstellar is currently advancing the development of the small satellite launch vehicle ZERO, strategically aiming for the growing market of small-sized satellites. Building on the insights obtained through the development of the suborbital launch vehicle MOMO—the first privately developed rocket in Japan to reach space—Interstellar has put in place an end-to-end development and manufacturing approach. This approach guarantees competitive pricing and flexibility aligned with the changing business models of various satellites. Additionally, Interstellar offers convenience to domestic and Asia-Pacific satellite operators, by providing proximity to launch sites and minimizing the time and cost involved in launches.

Both companies, alongside Marubeni Corporation (Tokyo), which invests in both, jointly signed a Letter of Intent in February 2020 to study the development of an agile satellite release system. The agreement this time outlines both companies' commitment, with the support of Marubeni Corporation, to advancing their business collaboration in the future. D-Orbit, with a focus on the 'last mile delivery service' for satellites, and Interstellar, offering launch services, are collaborating with Marubeni Corporation's backing to establish a more cost-effective and flexible space transport service.

**Monica Valli, VP Operations of D-Orbit S.p.A,** commented:

“We are grateful to Marubeni Corporation, who paved the way for a collaboration with Interstellar Technologies. With this framework agreement we aim to leverage our expertise in in-orbit transportation and logistics to contribute to satellite deployment efficiency and expand in Asia the possibilities for space-based applications and research. We believe in the potential this collaboration and look forward to its future developments.”

**Keiji Atsuta, COO of Interstellar Technologies Inc.,** commented:

“First of all, we appreciate the support from Marubeni Corporation to reach further partnership with D-Orbit, who is the leader in the space logistics market. We are excited to work together to provide commercial companies, universities, and governments in Asia with the seamless and customer-focused ground to orbit transportation services through our collaboration. While space-related applications are crucial to addressing some challenges facing people in Asia, we believe in our alliance will contribute to solving them.”

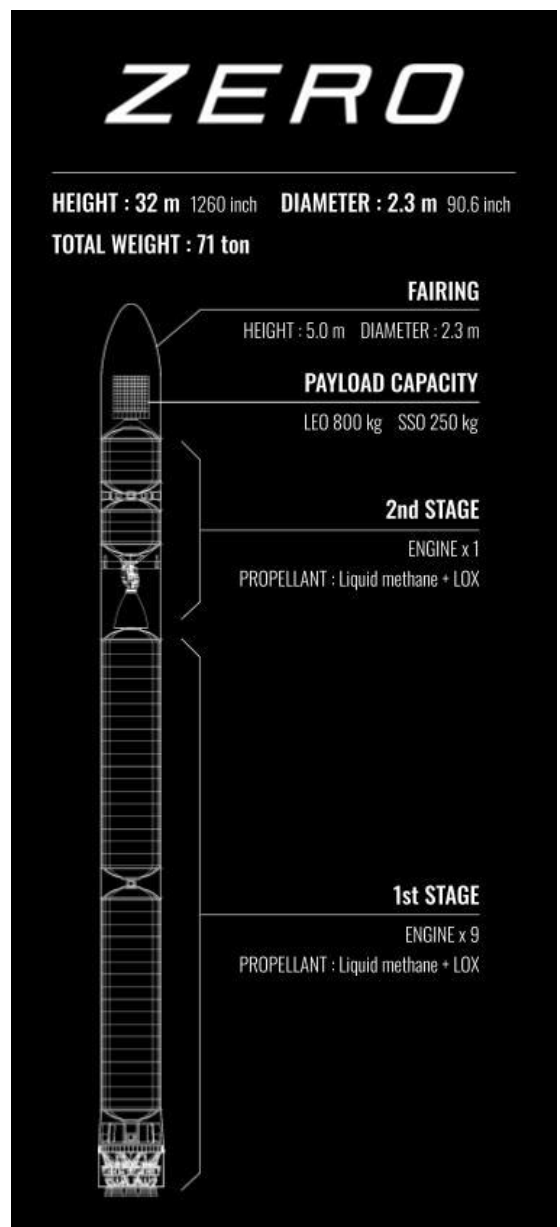
**Small Satellite Launch Vehicle ZERO**

ZERO is a small rocket designed for the transportation of small satellites, witnessing significant global demand, into space. It stands out by internally developed core technology, including a proprietary engine, a system known for its complexity and high cost. Interstellar adopts an end-to-end approach, handling design, manufacturing, testing, evaluation, and launch operations in-house, making it the sole domestic company with such integrated development. The company's emphasis on cost reduction includes integrating commercial-grade components into avionics.

The engine 'COSMOS' utilizes liquid biomethane (LBM), derived from livestock manure, as fuel. This choice is characterized by its excellent performance and availability, as well as its eco-friendly nature, contributing to the Earth's environment.

**ZERO: Specifications**

- Height: 32 m
- Diameter: 2.3 m
- Wet mas: Weight: 71 ton
- Propellant: Liquid Methane (Bio-Methane),  
Oxidizer: Liquid Oxygen
- Number of Engines: 1st Stage: 9, 2nd Stage: 1
- Payload Capacity: LEO 800 kg / SSO 250 kg  
(Future Maximum Capacity)



## **D-Orbit S.p.A**

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 traditional space companies requiring a test in orbit. ION can 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.

D-Orbit has offices in Italy, Portugal, the UK, and the US; its commitment to pursuing business models that are profitable, friendly for the environment, and socially beneficial, led D-Orbit S.p.A. to become the first certified B-Corp space company in the world.

Location: Viale Risorgimento 57, 22073 - Fino Mornasco, Como, Italy

Representative: Luca Rossetini, CEO

Business: In-orbit transportation, Payload hosting, Space-based edge compute, Space situational awareness, In-space communications

<https://www.dorbit.space/>

## **Interstellar Technologies Inc.**

Interstellar, a dynamic Japanese start-up, envisions a future where space becomes accessible to all through low-cost and convenient space transportation services. With the headquarters placed in Taiki, Hokkaido, Interstellar's product development spans four locations: the Tokyo branch, Fukushima branch, and a laboratory at the Muroran Institute of Technology.

Interstellar has achieved three successful spaceflights with suborbital launch vehicle MOMO, becoming Japan's first private company to reach space. Currently developing small satellite launch vehicle ZERO, Interstellar also leads Our Stars, a satellite development project, pioneering Japan's vertically integrated rocket-satellite service.

Location: 149-7 Memu, Taiki, Hiroo-gun, Hokkaido, Japan

Representative: Takahiro Inagawa, CEO

Business: Space Transportation Services

<https://www.istellartech.com/en>