



D-Orbit Launches ESA-Backed Call for Ideas to Demonstrate Commercial Cloud Computing in Space

The initiative offers an opportunity to test and validate data-processing applications on D-Orbit's proprietary on-orbit cloud computing platform.

Harwell, United Kingdom, September 8, 2022: Space logistics and transportation company [D-Orbit](#) announced a **call for ideas** aimed at developers of analytics services, information insights, edge computing, and AI/ML applications to process remote sensing, IoT, and other space-based data sources. The call aims at identifying **cloud applications that have already been deployed successfully on Earth in a commercial setting, which could take advantage of the reduced latency provided by an orbital cloud computing infrastructure.** This initiative offers an opportunity to test and validate data-processing applications on **D-Orbit's proprietary on-orbit cloud computing platform**, based on the [UniBap SpaceCloud iX5-100](#) on-board processor and new **AI services provided by Trillium.**

The platform enables both satellite operators and companies that use satellite data for commercial information services to run data processing algorithms directly in space, significantly reducing the traditional bottlenecks to accessing space data. This allows real-time processing of data acquired on-orbit for analytics services, information insights and other edge computing or AI/ML applications. Over the past year, the service has been tested with a small number of early users, and is now ready to be offered to a larger audience of application developers.

Interested companies are invited to submit ideas for applications to the D-Orbit team at info@dorbit.space by September 30, 2022.

D-Orbit plans to deploy additional nodes by integrating them onboard their orbital transfer vehicle ION Satellite Carrier, a multi-purpose vehicle designed to transport third-party satellites across orbits and deploy them into custom orbital slots. The vehicle is also able to operate proprietary and third-party payloads.

*"The processing of space data is a cornerstone of the New Space economy," said **Chris Brunskill, D-Orbit's advanced services senior program manager.** "The sheer volume of data to downlink and the limited bandwidth of space-to-ground communication have always been a major performance bottleneck. The ability to process data directly in orbit through a scalable cloud platform like those we use here on Earth will enable the creation of a new generation of responsive data-driven applications."*

*"The trend of generating high value information rapidly in space and make the most use of available communication bandwidth is growing rapidly now," said **Lena W Jansson, CEO of Unibap.** "It is great to see that our combined efforts to democratize space with SpaceCloud is now enabling creation of responsive data-driven applications in a European Space Agency context. This also represents an avenue to space for ideas stemming from the SpaceEdge lab at AI Sweden."*

*"At Trillium we were privileged to be an early user of the SpaceCloud system with D-Orbit and Unibap," commented **Dr Cormac Purcell, Chief Scientist, Trillium Technologies.** "It has been amazing to see how quickly we could build our WorldFloods AI application using familiar tools and libraries. The ability to rapidly test and iterate development our AI model in orbit is game-changing."*

The initiative is part of the [European Space Agency's](#) Discovery Element of the Basic Activities, which aims at identifying innovative ideas for research in space that could be implemented as



system studies, early technology developments, or co-sponsored research. The details of the projects funded under this programme can be found here:

https://www.esa.int/Enabling_Support/Preparing_for_the_Future/Discovery_and_Preparation/Implemented_OSIP_ideas_May_2022

This project is funded by ESA's Discovery Element of the Basic Activities (<https://www.esa.int/discovery>). The project is part of the Cognitive Cloud Computing in Space campaign supported by phi-lab (<https://philab.esa.int/>).

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 traditional space companies requiring a test in orbit. The whole, fully redundant 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.

Contacts

Elena Sanfilippo Ceraso – Media Manager
comms@dorbit.space

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