

PRESS RELEASE

Earth Observation reimagined: Marble Imaging and Reflex Aerospace partner to deploy Europe's pioneer Earth Observation (EO) satellite network



Winners of the DLR's 'Kleinsatelliten Nutzlastwettbewerb' from left to right: Marble's Alexander Epp (CMO), Dr. Gopika Suresh (CSO), Robert Hook (CEO), Reflex Aerospace's Walter Ballheimer (CEO), and Dr. Daniel Kliche, SVP Innovations Center at IABG

- **Marble Imaging to develop the first of up to 200 advanced satellites in partnership with Reflex Aerospace**
- **Small satellite platform and launch on a European carrier to be sponsored by the [German Space Agency at DLR](#) after Marble Imaging wins the space [agency's Small Satellite Payload Competition](#) ('Kleinsatelliten-Nutzlastwettbewerb')**
- **Satellite fleet aims to address urgent need for Earth Observation capabilities, strengthening sustainability by supplying real-time insights through very high-resolution (VHR) imagery**

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Bremen, Berlin, and Munich, Germany – [Marble Imaging](#), with the support of strategic partner [Reflex Aerospace](#), is set to make the first step towards revolutionizing the Earth Observation (EO) industry.

With a planned constellation of up to 200 small satellites, Marble Imaging aims to be the leading European EO company capturing images of the entire planet every day in very-high resolution (VHR). To achieve this goal, they have partnered with Germany-based satellite manufacturer Reflex Aerospace. Reflex Aerospace is one of the few NewSpace companies capable of developing satellite platforms that outperform similar systems in terms of stability and pointing accuracy, enabling very high-resolution satellite imagery.

“Our planet is facing significant challenges due to human activities impacting Earth,” says Robert Hook, CEO of Marble Imaging. “It’s crucial to understand these effects for a sustainable future. To do this, we need a big data approach to monitor these changes and develop solutions. But currently, there’s a gap in providing the necessary very high-resolution images essential for such applications.”

The derived EO data, analytics, and insights will cater to the needs of real-world applications and people. These include government organizations as well as commercial companies involved in, for example, environmental monitoring, implementation of sustainability and climate adaptation policies, ensuring food security, or providing humanitarian aid.

The initial satellite will be built for Marble Imaging by Reflex Aerospace with the funding coming via the German Space Agency at DLR in the form of an award to Marble Imaging who have won the Agency’s small satellite payload competition ([‘Kleinsatelliten Nutzlastwettbewerb’](#)). Marble Imaging’s payload will be hosted on the same platform as IABG Innovation Center’s RAISE (Resilient AI in Space and the Edge), an onboard AI computing cluster customized for [robust and safe autonomous space applications](#) – another competition winner.

“The ability to apply machine learning methods directly at the sensor and the edge in a robust and safe way is key to handling big data and enabling autonomous functions in the challenging and complex space environment,” says Dr. Daniel Kliche, SVP Innovations Center at IABG.

By developing Europe’s first EO VHR satellite constellation in partnership with Reflex, Marble challenges an overwhelmingly US-dominated market to strengthen European independence in the supply of VHR EO data.

Celebrating the news, **Walter Ballheimer, CEO of Reflex**, explains:

“At Reflex, we believe that the future of our planet depends on lightning-fast innovation in space, which is what drew us to Marble Imaging’s mission. Through this partnership, we will deploy emerging technology on tailor-made satellites to develop very high-resolution images that empower informed decision-making, positioning ourselves among the top-tier of EO platform manufacturers.”

Siegfried Monser, Space Coordinator of the State of Bremen, [congratulated Marble Imaging](#), calling it:

“A good day for the Space Community in Bremen and many other regions in Germany.”

Dr. Fabian Mehring, State Minister for Digital Affairs, commented:

“I congratulate the team at Reflex Aerospace for its impressive success. I am proud that the architects of progress once again come from Bavaria. Our Free State demonstrates itself once again as Europe’s high-tech stronghold and ideal home for future technologies, on the fertile grounds on which the global champions of tomorrow can grow.”

Prof. Dr. Rudolf F. Schwarz, CEO of IABG added:

“We congratulate Marble Imaging and Reflex on this significant step. We are proud to contribute to the success of the important first mission by providing our expertise and solutions for robust and safe AI.”

To achieve Marble Imaging’s goals, partnering with Reflex Aerospace was a logical step based on their ability to rapidly deliver the required customized high-performance technological solutions.

Reflex Aerospace’s dual-use approach harnesses modern manufacturing advancements and streamlined design processes to deliver enhanced reliability, the highest-performing core avionics in class, and accelerated delivery times.

The instruments for the first satellite are currently being co-developed with Marble Imaging’s key partner, the Polish company [Scanway](#), which delivers advanced optical instruments for space applications. Scanway’s tools will be able to provide global data of the Earth’s surface at a targeted resolution of 0.8-meter Ground Sampling Distance (GSD) in the Visual and Near Infrared (NIR) spectrum and will include a panchromatic band.

Satellites of the future constellation will be equipped with the same instruments and will also image with Short Wave Infrared (SWIR) bands. The envisioned dual-instrument solution also aims to maximize synergies with the European Copernicus program.

Marble Imaging AG

Marble Imaging, founded in August 2023 in Bremen, the heart of Germany's aerospace industry, aims to disrupt the EO market. With a shared background covering the entire spectrum of Earth Observation from mission design and management, data processing, and extensive EO data usage, the company deeply comprehends the value of global data for real-world applications and the shortcomings in the existing market.

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Reflex Aerospace GmbH

Based in Munich and Berlin, Reflex Aerospace enables lightning-fast innovation in space by designing and manufacturing 100 to 500 kg payload-specific, dual-use satellite platforms within 12 months. Reflex is redefining satellite development by blending verticalized in-house design and manufacturing, end-to-end support, secure-by-design modules, hardware-accelerated encryption, and the highest-performing core avionics in its class.

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