Lacuna Expands Direct-to-Device IoT Network with Successful ‘Call of the Wild’ Satellite Launches

FOR IMMEDIATE RELEASE

Harwell, UK, 24th June 2025 - *Lacuna Space today announced the successful launch of new satellites under its *Call of the Wild* mission banner — a major step forward in scaling the world’s leading direct-to-device (D2D) IoT network.*

This is the first of several launches planned for 2025, bringing increased global capacity to meet the fast-growing demand for ultra-low-power, infrastructure-free sensor connectivity in remote environments.

The satellites feature Lacuna’s proprietary LoneWhisper® payload, designed and built entirely in-house. It is optimised to receive small, infrequent messages from low-power devices and transmit them directly to orbit, enabling true global coverage without the need for ground-based communication infrastructure.

“The demand for remote IoT connectivity is accelerating fast — and that’s what’s driving this next phase of growth,” said Rob Spurrett, CEO, Lacuna Space. “We’ve already proven that our technology works where others simply can’t: in remote, infrastructure-free environments. Now we’re scaling to meet real-world demand. This mission marks a step-change: from pilot projects to large-scale, operational deployments.
With LoneWhisper®, we’ve built the highest-capacity direct-to-device LoRa® receiver in orbit — giving us the ability to support more devices, more reliably, than any other solution in the market. Our system is designed not just to reach remote places, but to scale across the globe.”

Meeting Global Needs: Water Quality Monitoring

Water is among the most critical, and least connected,resources on the planet. Traditional monitoring often depends on manual sampling and site visits, making it expensive, inconsistent, and impractical in remote or dispersed areas.

Lacuna’s direct-to-device connectivity changes that. With low-power sensors transmitting data directly from the field, organisations can now monitor water quality continuously, in real time, without relying on cellular networks or gateways.

Field deployments are already supporting:

• Monitoring boreholes and wells for pH, turbidity, and salinity

• Tracking salinity and runoff in agriculture

• Detecting pollution in rivers and coastal zones

These sensors typically send only a few small messages per day, and often operate for years on a single battery.

“From early flood warning systems and pollutant tracking to compliance monitoring for agriculture and industry, the demand for low-power, wide-area connectivity is only increasing. Satellite IoT, as delivered by Lacuna Space, is uniquely positioned to meet this demand.” said Clifford Shapland, Digital Development Officer at Ceredigion County Council. “The ability to capture consistent and accurate measurements in hard-to-reach areas has unlocked a new level of granular environmental insight. We see this use-case as effectively limitless in scale and duration. Wales alone has over 33,000 km of rivers and streams, many of which pass through rural or isolated terrain.”

Proven Technology, Built for Scale

Lacuna Space was the first to fly Semtech’s high-capacity LoRa® chipset back in 2019. Since then, the team has run multiple missions, completed detailed global spectrum surveys, and fine-tuned every element of the system. This deep experience means they understand how to get the best out of the technology, whether it is tracking soil moisture for smart agriculture or monitoring water quality in remote regions, the system is built for dependable performance in the toughest environments.

“Lacuna Space is a prime example of UK innovation in satellite communications, addressing real-world needs,” said Dr Paul Bate, Chief Executive of the UK Space Agency. “Their low-power, direct-to-device connectivity brings the benefits of space down to Earth by enabling efficient and affordable IoT services, including monitoring of vital resources such as water infrastructure. The UK Space Agency is proud to support Lacuna’s journey to becoming a global leader in satellite-based IoT, showcasing the UK’s leadership in new satellite communications markets.”

The *Call of the Wild* satellites are the first of several new missions launching this year. Together, they will significantly expand Lacuna’s coverage and message throughput, strengthening its position as a global leader in direct-to-orbit IoT for remote monitoring.

Water quality monitoring is just one example of how Lacuna’s network is being used to solve critical challenges in hard-to-reach environments across the globe. Contact us to learn more about how we can help you reach sensors in the wild.

About Lacuna Space

Lacuna Space delivers direct-to-device IoT connectivity service using ultra-low-power protocols optimised for small, infrequent messages. Built on its proprietary LoneWhisper®

technology, Lacuna's network supports remote sensors across agriculture, environment, utilities, and the oceans — enabling reliable global coverage with no ground infrastructure. Lacuna operates from offices in the UK and the Netherlands, with support from the UK Space Agency and the European Space Agency.

📍 Headquarters: Harwell Space Cluster, Oxfordshire, UK — originally established as an ESA Business Incubation Centre (ESA BIC) company, and voted one of ESA Rising Stars of 2024.

🌐 Website: www.lacuna.space

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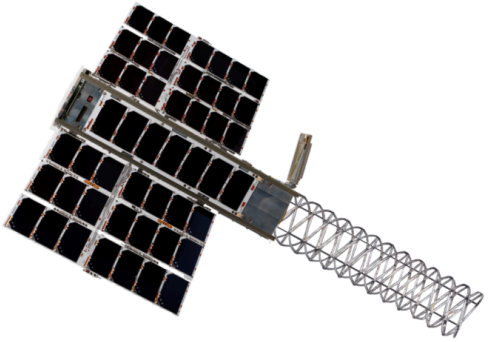
(SpaceX's Falcon 9 preparing to launch the Transporter-14 mission, carrying Lacuna's newest satellites into orbit. Photo by SpaceX.)



(Left: One of Lacuna's newest satellites, built by Spire with an antenna by Oxford Space Systems. Right: Mission patch for Lacuna Space's "Call of the Wild" mission.)