

SpeQtral and Addvalue Sign MoU to Advance Quantum-Secure Satellite Services with Always-On IDRS Connectivity

SINGAPORE — 2 February 2026 — SpeQtral Pte. Ltd. and Addvalue Innovation Pte. Ltd. today signed a Memorandum of Understanding (MoU) to explore collaboration on an integrated quantum key distribution (QKD) satellite solution. This partnership combines homegrown quantum communications with a Singapore-developed real-time relay capability, and aims to unlock new market opportunities by offering quantum secure, resilient satellite communication capabilities tailored for next-generation networks. Together, the parties will explore joint go-to-market strategies and co-development initiatives to accelerate the adoption of quantum-secure technologies across global satellite ecosystems.

Collaboration built on proven capabilities

Under the MoU, the Parties will jointly assess Quantum Communication satellite constellation design, and Concept of Operations (CONOPs), to enable service-oriented satellite-based QKD solutions that are designed to cater to the real-world operational requirements, including the ability to address real-time tasking and key establishment requests.

Addvalue's IDRS solution provides on demand, 24/7 relay connectivity for LEO missions using GEO links, delivering secure, continuous IP sessions (with proven >200 kbps data rates) to dramatically reduce operational latency versus traditional ground station scheduling—a fit for time-sensitive QKD service tasking, optimization and orchestration.

SpeQtral's space heritage includes the **SpeQtre** mission, launched in November 2025 with RAL Space, which is now under commissioning to demonstrate space-to-ground quantum communications from a 12U CubeSat—positioning Singapore as a contributor to the emerging global quantum secure networking landscape.

Driving Quantum Innovation in Singapore's Space Sector

The collaboration between SpeQtral and Addvalue is aligned with the accelerating global momentum to operationalize satellite-based quantum key distribution (QKD). By focusing on service readiness and operational availability, the SpeQtral-Addvalue partnership positions itself at the forefront of this technological evolution, ensuring that

quantum-secure satellite communications are ready to meet the demands of next-generation networks.

This MoU also supports Singapore's national strategy to strengthen its space sector and foster international collaboration. With the global space economy projected to reach US\$1.8 trillion by 2035, Singapore is actively building capabilities and driving commercialization to capture emerging opportunities. Local quantum-safe deployment initiatives are also expected to generate downstream demand for space-delivered QKD keys and seamless integration with terrestrial fibre QKD infrastructure. By addressing the satellite service layer and enhancing operational resilience through Addvalue's IDRS, this partnership complements Singapore's broader efforts to establish itself as a leader in quantum-secure communications and space technology.

Lum Chune Yang, Cofounder & CEO, SpeQtral: "Space-based QKD must be paired with reliable, realtime classical connectivity to translate demonstrations into services. Partnering with Addvalue on IDRS lets us explore how to orchestrate QKD passes, postprocessing, and key delivery to meet operational requirements of future customers."

Tan Khai Pang, CEO, Addvalue: "LEO missions increasingly demand on-demand links and fleetwide coordination. With IDRS providing 24/7 relay and secure IP continuity, we see strong potential to underpin quantum secure services and accelerate commissioning and operations for QKD satellites."

About SpeQtral

SpeQtral is a pioneer in quantum communications, with a vision to build and deploy global quantum networks. SpeQtral develops quantum-secure products and services designed to protect sovereign and enterprise telecommunication networks against classical, as well as future quantum-based cyber-attacks on cryptography. Combining both terrestrial and space-based solutions, SpeQtral aims to secure the world's networks against the threats posed by the imminent quantum revolution and drive innovation in quantum communications that will serve as the building blocks for the future quantum internet.

<https://speqtralquantum.com/>

About Addvalue

Addvalue Innovation Pte Ltd, a wholly-owned subsidiary of SGX Mainboard-listed Addvalue Technologies Ltd (A31), is a leading satellite-based communication solutions company. Addvalue provides state-of-the-art communication terminals for use in space, in the air, at sea and on the ground. The company also offers extensive engineering and integration services. Addvalue's expertise extends far beyond where the world's terrestrial networks end. Whatever the market or application, the company's wide range of satellite-based products and services can offer the right technology to drive enhanced connectivity.

Learn more at www.addvaluetech.com

About IDRS

Addvalue's Inter-Satellite Data Relay System (IDRS) is a pioneering communications solution that enables real-time, always-on, on-demand connectivity between Low Earth Orbit (LEO) satellites and ground operations by relaying data through Inmarsat's L-band GEO satellite network. It was first commercialised in November 2020, when Inmarsat (now Viasat) and Addvalue jointly announced the commercial service introduction of the world's first publicly available real-time high-low Earth orbit data relay link, marking a major breakthrough in continuous satellite-to-ground communications.

Learn more at www.idrsspace.com

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