



## Press Release

Geneva, May 31<sup>st</sup> 2023

### **ID Quantique joins EAGLE-1, Europe's pioneering quantum key distribution initiative**

*The ESA- and EC-supported EAGLE-1 LEO satellite will be equipped with innovative security features developed by ID Quantique and TESAT, Europe's leading laser communication technology company.*

**ID Quantique (IDQ), the leader in quantum-safe security solutions, is proud to announce its participation in the EAGLE-1 initiative. EAGLE-1 is a QKD (Quantum Key Distribution) system integrating both space and ground segments that will deliver secure transmission of encryption keys across geographically dispersed areas and demonstrate the connection from space of EU's national quantum communications infrastructures for truly sovereign networks. EAGLE-1 is developed by a consortium of 20 European organisations led by SES and funded, in part, by the European Space Agency and the European Commission. For its part, IDQ will contribute to the development of a space-qualified cryptographic key generation system based on IDQ's quantum random number generator (QRNG) technology to TESAT, EAGLE-1 consortium member and Europe's leading laser communication technology company.**

TESAT will manufacture the QKD payload comprising the Scalable Optical Terminal SCOT80 to establish a secure optical link from space to ground, as well as the QKD module of the satellite.

To deliver the payload, TESAT selected ID Quantique to contribute to the design and delivery of a space-qualified cryptographic key generation system based on IDQ's [Quantum Random Number Generator \(QRNG\) chipsets](#) technology. The high-performance electronic board integrated into the EAGLE-1 QKD payload will generate the random key material that will be further transmitted by the satellite to the ground stations.

The technology integrated into the EAGLE-1 system will include built-in redundancy and is specifically designed to be associated with the satellite communications and data transmission for such areas as government, telco operators, cloud providers and banking, to add guaranteed security of the cryptographic applications.

"We are delighted to bring our expertise in integrating secure technologies, and a track record of almost 80,000 executed optical satellite links for the benefit of this highly-important and timely European project," said Thomas Reinartz, CEO of TESAT. "The EAGLE-1 system allows for achieving synergies together with leading industry partners, reducing time to service and to market for the quantum secure technologies and its future key users, such as governments and institutions, or banking sector. Together with ID Quantique, we are looking forward to strengthen European collaboration and contributing to European sovereignty in space."

"Ensuring that communications remain safe is increasingly vital, and even more so with the rapidly-emerging technology of quantum computing," said Grégoire Ribordy, CEO of ID Quantique. "We are delighted to join this project, by providing our QRNG chipsets and space-qualified electronics that will enable the security of the

QKD satellite, and allow the EU Member States to leverage the most innovative technology for development of secure and sovereign networks.”

### About EAGLE-1

The EAGLE-1 project comprising satellite and ground infrastructure is developed by SES and its consortium of 20 European partners, and is co-funded by the ESA contribution of Germany, Luxembourg, Austria, Italy, the Netherlands, Switzerland, Belgium, and the Czech Republic under ARTES, as well as the European Commission through Horizon Europe.

Once launched in 2024, the EAGLE-1 satellite will complete three years of in-orbit mission. During the operational phase, the satellite will allow European Union governments and institutions as well as critical business sectors early access to long-distance QKD that would pave the way towards an EU constellation enabling ultra-secure data transmissions.

Learn more about EAGLE-1 and SES-led consortium of European partners [here](#).

### About ID Quantique

Founded in 2001 as a spin-off of the Group of Applied Physics of the University of Geneva, ID Quantique is the world leader in quantum-safe crypto solutions, designed to protect data for the future. The company provides quantum-safe network encryption, secure quantum key generation and Quantum Key Distribution solutions and services to the financial industry, enterprises and government organizations globally. IDQ’s quantum random number generator has been validated according to global standards and independent agencies, and is the reference in highly regulated and mission critical industries – such as security, encryption, critical infrastructure and IoT – where trust is paramount.

Additionally, IDQ is a leading provider of optical instrumentation products, most notably photon counters and related electronics. The company’s innovative photonic solutions are used in both commercial and research applications. IDQ’s products are used by government, enterprise and academic customers in more than 60 countries and on every continent. IDQ is proud of its independence and neutrality, and believes in establishing long-term and trusted relationships with its customers and partners.

To learn more, please visit [www.idquantique.com](http://www.idquantique.com).

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