

SITAEEL SIGNS DEAL WITH SES TO DELIVER SATELLITE PLATFORM FOR EUROPE'S EAGLE-1 QUANTUM CRYPTOGRAPHY SYSTEM

- *Sitael will realize PLATiNO, a totally 'Made in Italy' multifunctional satellite platform, a project of the Italian Spatial Agency for the Eagle 1 low earth orbit satellite.*

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SITAEEL, an Italian aerospace company of the Angel Group, has been awarded the contract by the Luxembourg-headquartered provider of global satellite connectivity services **SES** to supply a **PLATiNO** platform in the framework of the **EAGLE-1** project, aimed at developing and validating Europe's first satellite Quantum Key Distribution (QKD) system. PLATiNO Platform has been chosen by SES for the high level of modularity and flexibility that allows to integrate different types of payloads. It is the first contract ever for supplying a satellite platform between an Italian company and the international satellite connectivity services provider SES.

The PLATiNO platform is the result of the best capabilities of the Italian space industry and is based on the technologies developed by SITAEEL together with Thales Alenia Space (JV Thales 67% and Leonardo 33%), Leonardo and Airbus Italia for ASI (Italian Space Agency). PLATiNO is a new generation "all-electric" and multifunctional platform, designed to perform a wide range of services, that can also be deployed in satellite constellations. Despite its compact size, it has unique pointing and agility performance and is suitable for a variety of missions in low earth orbit, from radar to optical observation, from telecommunications to electronic intelligence.

The groundbreaking partnership between the European Space Agency (ESA) and an SES-led consortium of 20 European players, supported by the European Commission, will see the development of Europe's first sovereign end-to-end space-based Quantum Key Distribution (QKD) system EAGLE-1. A dedicated low earth orbit (LEO) satellite, ground network and a state-of-the-art QKD operations centre will provide the European Union governments and institutions, as well as critical business sectors early access to long-distance QKD, paving the way towards an ultra-secure data transmission system in Europe. Due to launch in 2024, the EAGLE-1 system will gather valuable mission feedback and represents a major step towards a secure and scalable European Quantum Communication Infrastructure.

As part of the EAGLE-1 mission, SITAEEL will be responsible for the design and the construction of the PLATiNO platform, to embark the quantum payload chain supplied by SES, up to the launch and commissioning of the satellite.

"We are very proud of the trust SES has placed in SITAEEL and the possibility of actively contributing to ESA, European Commission and SES's vision towards the future of the Quantum Key Distribution." - underlines **Chiara Pertosa**, CEO of SITAEEL. "PLATINO represents a real and concrete paradigm shift of the New Space Economy, generating important economic fallouts and an export opportunity by enhancing public investment. The technological development achieved thanks to the vision of the Italian Space Agency strengthens the Italian positioning in the aerospace sector on the international scene."

"Space innovation is critical in supporting the EU's vision of secure data exchange and connectivity systems. Under this ESA's initiative, supported by the European Commission, and with key European partners like SITAEEL onboard, we are delighted to be shaping the future of the quantum secure communications, with space technologies as a critical building block," said **Ruy Pinto**, Chief Technology Officer of SES. "We are very glad that some of the best Italian space expertise joins us and other European consortium members to work on the EAGLE-1 project."

About EAGLE-1

EAGLE-1 is a satellite-based end-to-end system for secure Quantum Key Distribution (QKD). In the framework of the project, an SES-led consortium of 20 European companies, with the European Space Agency (ESA) and European Commission support, will design, develop, launch and operate the EAGLE-1 satellite-based end-to-end system for secure Quantum Key Distribution (QKD), enabling in-orbit validation and demonstration of next-generation cybersecurity across Europe.

Using the EAGLE-1 system, ESA and the European Union Member States will achieve the first step to demonstrate and validate QKD technologies from low earth orbit to the ground. The EAGLE-1 project will provide valuable mission data for next generation Quantum Communication Infrastructures (QCIs), contributing for example to the EU plans to deploy a sovereign, autonomous cross-border quantum secure communications networks.

The project is co-funded by the ESA contribution of Germany, Luxembourg, Austria, Italy, the Netherlands, Switzerland, Belgium and the Czech Republic under ESA's programme of Advanced Research in Telecommunications Systems, as well as the European Commission through Horizon Europe. Read more about [EAGLE-1](#).