



Memorandum of Understanding between AMOS S.A. and HITEC Luxembourg S.A.

Two European SMEs join forces for developing novel ground antennas for optical satellite communication.

Liège / Mamer - Thursday, April 18, 2024: The Memorandum of Understanding signed between the Belgian and Luxembourg companies in the presence of the Belgian State Secretary for Economic Recovery and Strategic Investments M. Thomas Dermine and the Luxembourg Minister of the Economy, SME, Energy and Tourism M. Lex Delles as part of the state visit to Belgium, is related to the development of optical antennas for laser satellite communications and the reception of quantum keys. This collaboration materializes the good relations between Belgium and Luxembourg in various fields including space and cybersecurity.

Lasers have revolutionized many areas of our society. From DVD to welding, from high-speed Internet to science, lasers have exceptional properties that can be harnessed to create new applications. One of these properties is their ability to reliably transport much more data than traditional RF transmissions. In space-to-ground communication, lasers offer the prospect of increasing throughput by a factor of 10 to 100. For this, satellites must be equipped with an optical communication terminal. On the ground, a new type of optical antenna is required. This antenna looks like a telescope, however adapted to meet the optical communication requirements.

While today most optical antennas are simply modified astronomical telescopes, AMOS and HITEC are convinced that dedicated solutions better match the needs of telecommunications operators. By combining AMOS' optical expertise with HITEC's telecommunication and ground station operation know-how in a new optical antenna, both companies can deliver a robust, efficient and reliable optical antenna for space-to-ground communication.

The signed Memorandum of Understanding formalizes this collaboration by engaging the two players in a common project to bring a unique innovative solution to the market. The application of the proposed antenna will not only be satellite communication, but also quantum key distribution, another revolutionary technology that will soon become



essential to protect future sensitive terrestrial or satellite communications. This collaboration will have impacts in the field of telecommunications, cybersecurity, space resilience and defense.

Xavier Verians, director of business development at AMOS SA declares *“I am very happy with this signature, as well as for having found in HITEC Luxembourg a partner who shares our values and our passion for high-tech solutions ensuring quality and excellence. We will closely collaborate and I hope that these efforts will lead to a quick deployment of the first products.”*

For Philippe Osch, Chief Executive Officer of HITEC Luxembourg SA, *“It is a great moment for our two companies to sign this memorandum of understanding as part of the state visit. Instead of developing our own solution alone, a mutual collaboration with AMOS will allow both parties to leverage their respective know-how to develop better products and to market them more effectively in this very demanding business. ”*

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AMOS S.A. (www.amos.be)

AMOS S.A. (Advanced Mechanical and Optical Systems), has been designing and building high-precision optical and mechanical equipment for almost 40 years. Its main products are telescopes for professional astronomy, ground-based or space-based optical systems, spacecraft test facilities and high precision mechanical equipment. AMOS is one of the world leaders for telescopes from 2 to 4m in diameter and a European leader for space optics. The company has a large customer base not only in Europe, but also in the United States of America, in India (ISRO, PRL, ARIES, etc.), and is also having some presence in other countries like Turkey.

Among its flagship achievements are the four auxiliary telescopes of the VLTi in Chile, the DAG telescope in Turkey, the Mount Abu telescope in India, system engineering for the Extremely Large Telescope of ESO, but also most of the Gaia's mirrors, optical components on many European meteorological or Earth Observation satellites, optical



elements on the Mars Express, Juno, Bepi-Columbo probes or even in the EUCLID and James Webb Space Telescope. AMOS also deployed a telescope in Redu, Belgium to test new technologies for optical communication and QKD.

HITEC Luxembourg S.A. (www.hitec.lu)

HITEC Luxembourg S.A., a 100%-owned Luxembourg company, has developed its business activities in the field of innovative and quality products and services.

HITEC offers high technology solutions covering different business areas: satellite ground segment; specific and standard equipment for testing and measuring of physical properties; traffic management; mission critical; engineering; consulting; software & ICT development and project management. HITEC serves private and public sector customers at a national and international level.

In our daily commitment, know-how, creativity, quality and perseverance are an integral part of HITECs' undertaking. Enthusiasm for technology and innovation and a dedication to life-long-learning are core elements of our company culture, reflected by our highly qualified and motivated staff.

HITEC is ISO 9001, ISO 14001, ISO 45001 and AQAP 2110 certified and has several labels, such as "SuperDrecksKëscht fir Betriber" (ISO 14024:2000 Standard), "Entreprise Socialement Responsable", Responsibility Europe, Made in Luxembourg (for most of the products & services) and is signatory of the IMS Diversity Charter and the "Pacte National – Entreprises et Droits de l'Homme Luxembourg".

HITEC's motto: market-oriented, client-centric and technology driven.