





# Airbus Defence and Space, the Mexican Space Agency and Mexican start-up Dereum Labs to collaborate on lunar resources extraction technologies

Mexican Space Agency support will help create a new In-Situ Resources Utilisation Programme

## @AirbusSpace @DereumLabs @AgencyMexican #SpaceMatters #Innovation #Moon #AirbusRoxy #NextSpace

**Mexico, 24 September 2021**– Airbus has signed a memorandum of understanding with the Mexican Space Agency (AEM) and the Mexican start-up Dereum Labs to collaborate on the technologies needed for lunar resources extraction. This will lead to the creation of a new Mexican In-Situ Resources Utilisation (ISRU) Programme for lunar extraction and help develop the necessary industrial ecosystem for this technology in-country.

A ground demonstration concept is planned as part of this new programme. It will develop an end-to-end process from regolith identification and capture to extraction of resources. Specialist Mexican universities will also be invited to contribute to the project. This strategic demonstration will develop in-situ resource utilisation (ISRU) and Mexican capabilities, paving the way for future space exploration developments in Mexico and international cooperation with the private sector.

Innovative technologies from Mexico will contribute to a sustainable presence of humankind on the Moon. Under the helm of AEM, technologies from Dereum Labs will be key to ISRU systems for using local Moon resources like regolith, to extract oxygen and metal, or to mine water. These will be crucial to sustain life on the Moon and provide the resources needed to explore further. If such technologies are demonstrated, resources such as oxygen, water and fuel will not need to be sent from Earth. The journey towards a sustainable cis-lunar economy has started with Mexican technology aboard!

"This agreement represents the first step in a fruitful collaboration with Mexico in space activities," said Victor de la Vela, Head of Airbus in Latin America & the Caribbean. "Being able to extract and process lunar resources is essential to sustain long term living on the Moon. This collaboration gathers the right partners with the latest technologies and capabilities for a clearer horizon in lunar exploration."

"At Dereum Labs we envision and work for an interplanetary economy; in a few years, the industries that today are not related to space will be doing business on the Moon, Mars and beyond," said Carlos Mariscal, CEO of Dereum Labs. "With this agreement, the Mexican Space Agency, Airbus Defence and Space and Dereum Labs are taking together a huge step towards that future; today Mexico is contributing to long-term human presence in space. We are absolutely thrilled!"



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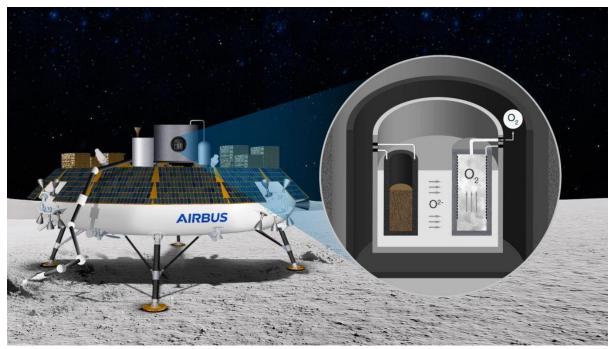






"A great objective of the Mexican Space Agency has been to promote talent and entrepreneurship among our new generations, as well as the space industry in the country, so we are very pleased with this alliance," said the Director General of the AEM, Dr. Salvador Landeros Ayala.

Dereum Labs is developing innovative swarms of low-cost, modular rovers to demonstrate the mobility and communicability of robotic vehicles on the Moon for data gathering and mapping of lunar resources. Airbus is focusing on the key bricks for a lunar ecosystem: it is developing the technology to get vehicles and cargo to the surface of the Moon and then to explore and extract resources. It is also developing the ROXY system to extract oxygen and metals from lunar regolith since they are key elements of a sustainable lunar presence. Airbus Defence and Space and Dereum Labs share the same vision that leading terrestrial companies in key sectors like energy, infrastructure and mining should also be part of Moon exploration programmes.



ROXY enables the design of a small, simple, compact and cost-efficient regolith to oxygen and metals conversion facility, and is therefore ideally suited to support a wide range of future exploration missions © Airbus

#### **About Airbus**

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide efficient and technologically-advanced solutions in aerospace, defence, and connected services. In commercial aircraft, Airbus offers modern and fuel-efficient airliners and associated services. Airbus is also a European leader in defence and security and one of the world's leading space businesses. In helicopters, Airbus provides the most efficient civil and military rotorcraft solutions and services worldwide.

#### About Dereum Labs









Dereum Labs is a fast-growing Mexican start-up with the goal of enabling non-space-related industries to take their businesses to the Moon, Mars and asteroids. Dereum Labs provides strategic space information, mission planning and design, and payload delivery services through space robotics.

Dereum Labs is the Mexican leader in commercial robot-based space exploration and seeks to sustainably contribute to the raising interplanetary economy by developing technology to support long-term human activities in space.

#### About AEM

The Mexican Space Agency is a decentralized public body of the Federal Government and sectored in the Ministry of Communications and Transportation. Its mission is to use science and space technology to meet the needs of the Mexican population and generate jobs with high added value, promoting innovation and development of the space sector; contributing to the competitiveness and positioning of Mexico in the international community, in the peaceful, efficient and responsible use of space.

#### Newsroom

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