

ALPAO, selected for the French space recovery plan, as part of a consortium led by Airbus Defence & Space

Grenoble (France) – November 15, 2021 – ALPAO, selected for a prestigious consortium to contribute to the development of the space industry as part of the French recovery plan, is strengthening its leadership position in adaptive optics.

One of these collaborative projects aims to structure the French industrial sector for satellite laser communications. The purpose is to supply future equipment and technologies for very high-speed bidirectional optical links between the ground and the satellite for satellite telecommunications missions in geostationary orbit. This project “Optical Communications” brings together the best experts in a consortium¹ led by Airbus Defence & Space and operated by CNES.



After the recent health and economic crisis, the French government has initiated a national recovery plan, with a focus on the space sector with €515M, including €150M for dual research (civil and military). Thus, CNES has launched calls for collaborative projects to structure the sector and co-finance industrial projects in order to irrigate the entire space ecosystem.

“The deployment of the space component of France Relance will enable the French space industry to emerge rapidly from the crisis, and new innovative players to emerge and invent the space infrastructures and services of tomorrow” said Bruno LEMAIRE, French Minister of Economy, Finance and Recovery.

Referenced by 18 of the top 20 universities in the Shanghai ranking, ALPAO is used to taking on multidisciplinary technological challenges. ALPAO regularly collaborates with Professor Eric BETZIG, winner of the Nobel Prize in Chemistry in 2014 for his work on very high resolution fluorescence microscopy, as well as with the team of the Nobel Prize in Physics in 2020, Reinhard GENZEL and Andrea GHEZ for their research on the supermassive black hole in the Milky Way. The company also has prestigious industrial clients among its references, including some members of the consortium, such as Airbus Defence & Space and Thales Alenia Space. All the ALPAO teams are delighted to take part in this large-scale France Relance project to contribute to the technological and economic development of the sector.

About ALPAO

ALPAO, leader in optical wavefront control, aims to revolutionize optics by removing aberrations. ALPAO designs and manufactures a complete range of adaptive optics products for use in research and industry since 2008. ALPAO provides deformable mirrors, wavefront sensors and software. ALPAO’s products are tailor-made for various applications such as astronomy, ophthalmology, microscopy, wireless optical communications and laser applications.

ALPAO has developed several products over the years, such as deformable mirrors (DM), its own wavefront sensor for closed loop operations, the DM97-08 dedicated to vision science application, a large size DM (DMX) and a modal deformable mirror for industry. ALPAO also delivered the largest European deformable mirror which includes 3.228 actuators. With more than 10 years of experience in adaptive optics, ALPAO’s deformable mirrors allow large stroke, fast deformation, high resolution images and very good optical quality. ALPAO is an international company with customers on four continents in over 20 countries, representing 90 percent of its turnover.

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¹ Consortium Partners: Airbus Defence & Space, Thales Alenia Space, SAFRAN Data Systems, Thales SESO, COMAT, BERTIN Technologies, CEDRAT Technologies, CILAS, MecanoID, NOKIA, IXBLUE, Lumibird, OGS technologies, Reuniwatt, Miratlas, ALPAO, Cailabs.