

Airbus to Develop CO3D Earth Observation Programme for CNES



The French Space Agency (CNES) has awarded the CO3D (Constellation Optique 3D) contract to Airbus. Under this agreement, Airbus will deliver a global high-resolution digital surface model (DSM). Following launch, which is expected in late 2022, the Airbus-made CO3D constellation, comprising four identical satellites, will deliver 50cm-resolution stereo imagery across the world on a daily basis. The data acquired will feed a cloud-based processing chain operated by Airbus and integrating CNES' algorithms, to produce a cutting-edge 3D map of the Earth's landmass.

Designed to weigh approximately 300kg, the [CO3D satellites](#) will join Airbus' fleet of optical and radar satellites, strengthening the company's ability to meet the growing needs of very demanding applications. Inaugurating a generation of highly innovative and all

electric platforms, these extremely agile satellites will instigate a new way of acquiring, processing and transferring images to the ground. Together with the four Pléiades Neo satellites, the CO3D constellation will offer impressive refresh rates for very high-resolution imagery.

Access to very-high-resolution 3D data

"CO3D is a significant leap forward for global Earth observation, taking advantage of the latest Airbus innovations which will revolutionise access to very high-resolution 3D data" said Jean-Marc Nasr, head of space systems at Airbus. "This contract confirms Airbus as the trusted partner for [CNES](#) and the French Authorities, and reinforces our leading market position in Europe and the world."

CNES and Airbus have established a virtuous partnership with this project. An integrated and agile governance between both partners will enable the mission to be optimised to cover both private and public needs. Data collected by the CO3D constellation will be available for scientific and defence institutional partners of the programme.

During the signature event, Jean-Yves Le Gall, president of CNES, declared: "The new generation optical satellite constellation CO3D embodies French ambition and ingenuity and opens a new era for Earth observation. It will allow a higher refresh rate, improved performance and better resilience. This partnership between CNES and Airbus perfectly illustrates French excellence in Earth observation from space."