Green light for AMOS to deliver a key subsystem of METEOSAT THIRD GENERATION

After several years of intense design, manufacturing and testing work in its facilities in Liège, AMOS just received the green light from its customers, OHB, THALES and ESA, to deliver the first flight model of a key subsystem for the METEOSAT THIRD GENERATION space mission. MTG, the new generation of European meteorological satellites, will soon replace the Meteosat Second Generation spacecrafts which have been in operation since 2002.

With twin satellites in orbit and new technologies on board, MTG will provide more accurate and more frequent data to greatly improve the quality of our daily weather forecasts. In particular, one of the twin satellites, MTG-S, will embark an Infra-Red Sounder (IRS) designed to provide 4-dimensional information on humidity, temperature and winds, with a spatial resolution of 4 km and a temporal resolution of 30 minutes. This will be particularly useful to improve warnings on location and intensity of thunderstorms.

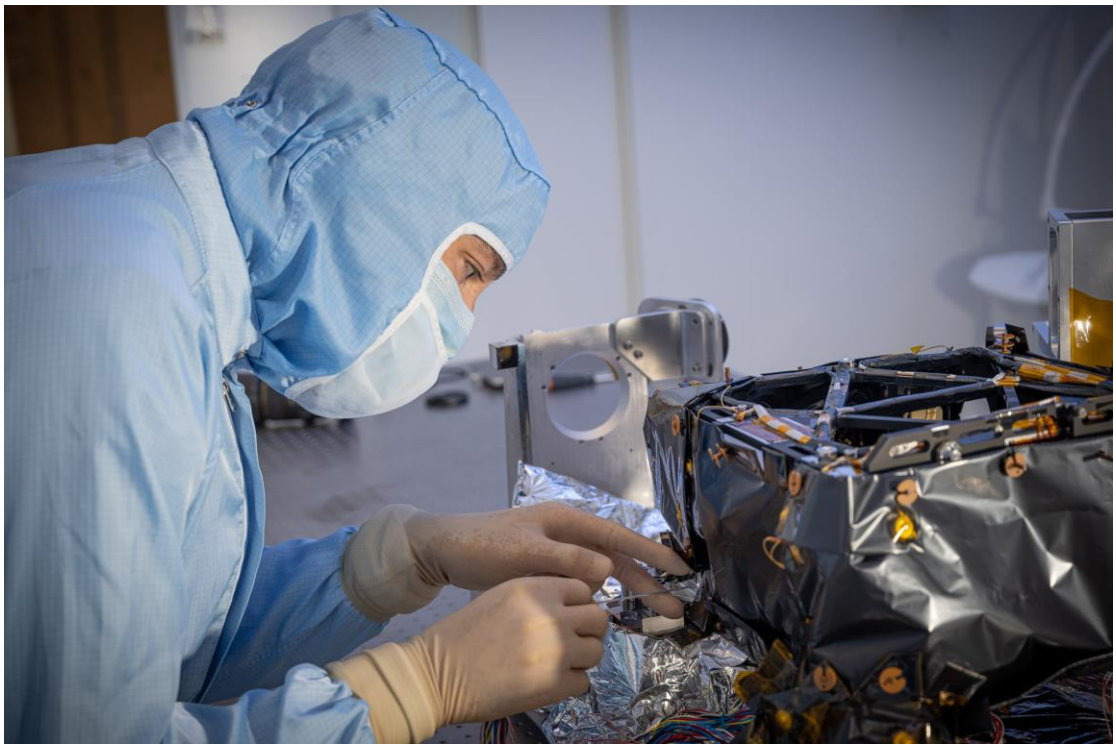
AMOS was contracted by OHB to deliver 2 Flight Models of the Back Telescope Assembly (BTA), an essential part of the IRS. The purpose of the BTA is to relay the light collected by the IRS front telescope looking at the Earth towards the infrared interferometer located at the heart of the instrument. The BTA is composed of 4 high accuracy optics precisely supported and thermally controlled within an extremely light-weighted 40 x 40 x 15 cm structure. A specific mounting interface has been designed to guarantee a very high stability of the all-aluminium system on the carbon-composite structure of the satellite.

Philippe Gilson, CEO of AMOS, said: “We are particularly proud to supply this equipment to OHB. It demonstrates the capability of AMOS to deliver complete space systems, not only consisting of high end optomechanical parts, but also a fully redundant active thermal control system. This is an important step in our strategy to develop complete optical instruments for small space missions.”

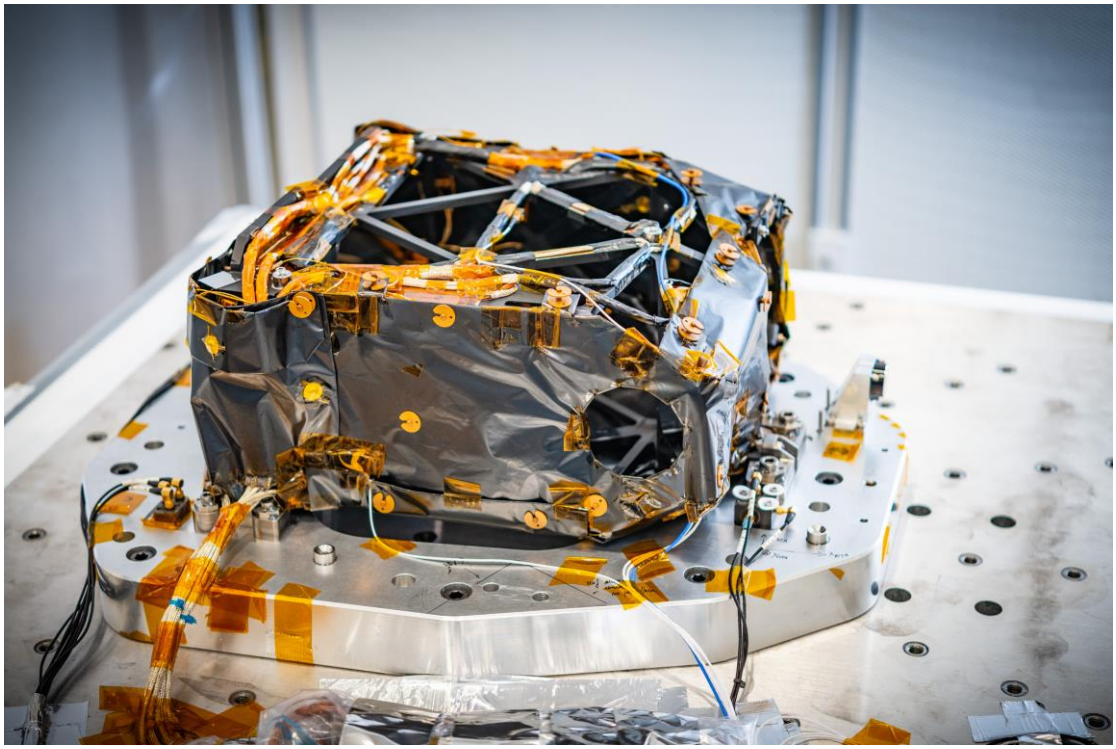
The first BTA will now be shipped to OHB, near Munich, in Germany, where it will be integrated in the IRS instrument. It will then be installed on the first MTG-S satellite to be launched in geostationary orbit.

The supply of the Back Telescope Assembly is one of 4 major contracts awarded to AMOS in the frame of the MTG mission.

Meteosat satellites are operated by EUMETSAT, the European Organisation for the Exploitation of Meteorological Satellites.



The BTA under assembly in the AMOS clean room (Copyright: AMOS)



The BTA ready for vibration testing (Copyright: AMOS)

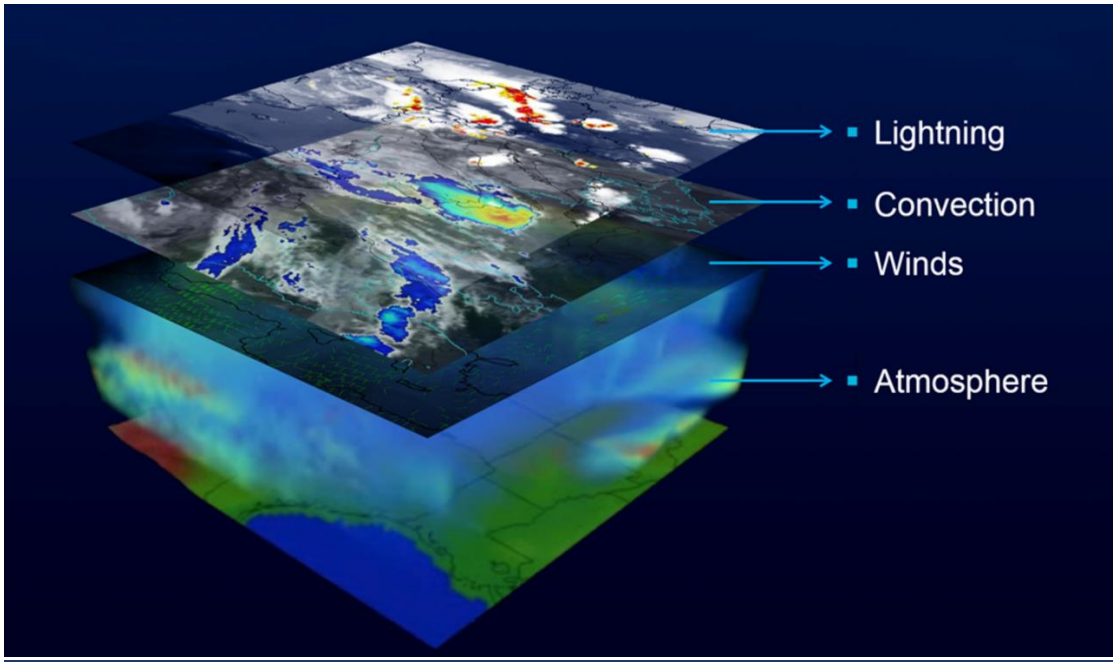


Illustration of weather data provided by MTG (Copyright: EUMETSAT)

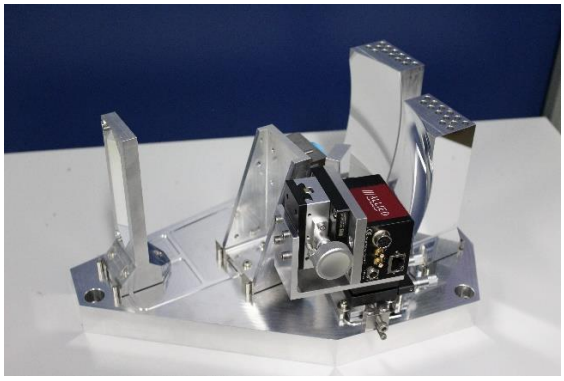
Artist view of the twin MTG satellites in geostationary orbit (Copyright: ESA)

Press Release

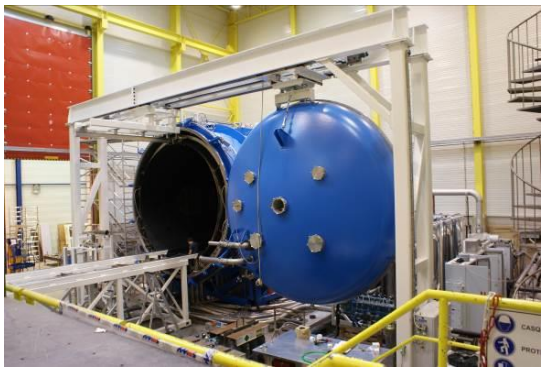
AMOS in a few words

Located in Belgium, AMOS has been designing and building high-precision optical and mechanical equipment for more than 35 years. Its main achievements are professional telescopes, space optical systems, test equipment for space instruments, and high-precision mechanical equipment. It employs more than 100 employees highly skilled in advanced technologies and offers services to the space industry, to the professional astronomy sector, to scientific laboratories and to industry.

AMOS has customers in Europe (ESA, ESO, AIRBUS DEFENCE & SPACE, THALES ALENIA SPACE, OHB), in United States (AURA), in India (ISRO, PRL, ARIES), and has more recently expanded its business in countries like China, Turkey and Russia.



Spectrometer of the ELOIS hyperspectral camera



Thermal-vacuum Test Facility for VSSC (ISRO)

ATS (Auxiliary Telescope Systems),
"mobile" telescopes of the VLTi in Chile (Cerro Paranal)

More information on AMOS, the MTG program and IRS instrument :
www.amos.be
https://www.eumetsat.int/website/home/Satellites/FutureSatellites/MeteosatThirdGeneration/index.html
https://www.eumetsat.int/website/home/Satellites/FutureSatellites/MeteosatThirdGeneration/MTGSoundingService/index.html

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