

EARTH OBSERVATION SYMPOSIUM (B1)  
International Cooperation in Earth Observation Missions (1)

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SYMPOSIUM KEYNOTE: MONITORING WEATHER AND CLIMATE FROM THE  
GEOSTATIONARY ORBIT: THE METEOSAT THIRD GENERATION (MTG) PROGRAMME

**Abstract**

The Meteosat Third Generation (MTG) will replace the currently operational Meteosat Second Generation (MSG) of European geostationary satellites starting from the 2018 time frame. The MTG System, designed to satisfy the evolving user needs for the 2018-2038 timeframe, will provide significant enhancement to the imagery mission of the Meteosat Second Generation satellites and introduce complete new observation missions from the geostationary orbit. To deliver these missions the space segment will encompass 2 MTG satellite series (MTG-I MTG-S) with the following instruments: MTG-I carrying a Flexible Combined Imager (FCI) and a Lightning Imager (LI), MTG-S carrying a hyperspectral InfraRed Sounder (IRS) and another instrument, the Ultraviolet-Visible-Near infrared sounder (UVN) to be provided by ESA through the GMES Sentinel-4 programme. All instruments are entirely new developments. These four instruments will be embarked on the two satellite series based on a common platform. Four MTG-I satellites and two MTG-S satellites will be delivered to cover the routine operational service of at least 20 years of for the imagery mission and 15.5 years lifetime for the sounding mission. MTG is established through the cooperation between EUMETSAT and the European Space Agency (ESA). ESA, within its MTG Space Segment Development Programme, designs and develops the protoflight satellites in accordance with the space segment requirements agreed between ESA and EUMETSAT. EUMETSAT, within its Meteosat Third Generation Programme, consolidates and maintains the end-user requirements, develops the ground segment, procures the launch services, procures the recurrent satellites with ESA as procurement agent, and provides the operational services throughout the satellites in-orbit lifetime. At space segment level, towards industry one single contract is placed with Thales Alenia Space (France) to develop the protoflight satellites and to produce the recurrent models. Following approval of the full programme both at ESA and EUMETSAT, work has progressed throughout Phase B at overall system, space segment and ground segment level and PDRs at satellite level and ground segment level are being prepared, baselining detailed design and plans for the development and production phases. The presentation will address programme status, plans and cooperation principles between ESA and EUMETSAT.