

MTG and EPS-SG – the benefits of New Generation Satellites for Nordic Countries

Nietosvaara, Vesa. Email: vesa.nietosvaara@eumetsat.int

Text Abstract

The first Meteosat Third Generation (MTG-I) satellite with Flexible Combined Instrument (FCI) will be launched at the end of this year. It will be followed later in 2024 by MTG-S Satellite with Infrared Sounder onboard. MTG will carry novelty instruments - Infrared Sounder, Lightning Imager and Ultraviolet Visible Near-infrared (UVN) Spectrometer - in the GEO orbit. Meteosat Third Generation aims to secure continuity and to increase the capabilities of the Meteosat satellites in response to requirements of the future forecast/nowcast systems. Altogether, the new and enhanced capabilities will allow us to make a huge step in better monitoring of our environment, and allowing development of new applications.

For the Nordic community EUMETSAT Polar System-Second Generation (EPS-SG) will be of particularly high interest. EPS-SG is composed of two series of spacecraft, Metop-SG A and B, flying on the same mid-morning orbit, like the current Metop satellites. This mission will continue the dissemination of information to improve numerical weather prediction (NWP) in Europe and worldwide and support Nowcasting applications especially at high latitudes where geostationary measurements are not available. Metop-SG satellites will carry several novel and enhanced instruments, including Infrared Atmospheric Sounding Interferometer - New Generation (IASI-NG) infrared sounder, and METimage multi-spectral imaging passive radiometer.

This presentation will introduce these new missions and show some of their expected benefits for monitoring the atmosphere, particularly in the Nordic countries.