EUMETSAT Systems and Plans

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The Organisation:
EUMETSAT's objective is to establish, maintain and exploit European systems of operational meteorological satellites, taking into account as far as possible the recommendations of the World Meteorological Organization. A further objective is to contribute to the operational monitoring of the climate and the selection of global climate change indicators.

The Mandate:
EUMETSAT is an intergovernmental organisation with currently 29 Member States and 2 Cooperating States.

The Mission:
- Deliver cost effective operational satellite data and products that satisfy the meteorological and climate data requirements of its Member States
- 24 hours a day, 365 days a year, over decades
- Encourage the maximum use of EUMETSAT data and products

The International Context:
EUMETSAT's meteorological satellites contribute to the World Meteorological Organization's (WMO) Global Observation System in close cooperation between European, French and Oceanic Space agencies (ESA, CNES, DLR), with the U.S. partners NOAA and NASA and with the European Commission.

Current Systems Assure Continuous Services until the 2020 Time Frame:

Meteosat Second-Generation (MSG):
- The current prime operational satellite is Meteosat-10 (MSG-3) at 19.2° E, providing backup at 23.5° E (Indian Ocean). MSG provides 5 min. rapid-scan coverage over Europe and Northern Africa (at 9.5° E). MSG is planned to be launched in 2016 and to start until 2018.

Meteosat Third-Generation (MTG):
- The second generation of geostationary Meteosat satellites (MTG) provides the operational service over Europe and Africa. MTG satellites will be launched since 2018 at a lower inclination (9.6°) and in a different orbital slot (18.3° E). MTG-I, the first satellite, was delivered from OHB on 25 November 2017. MTG-I is expected to be in orbit in 2019.
- MTG-I system:
- Air quality monitoring and atmospheric chemistry in synergy with Copernicus
- Multi-viewing, multi-channel, multi-polarization imager
- Visible-infrared Imaging Instrument (MetImage)

Meteosat Transition Programme (MTP):
- The first generation Meteosat series provides images in three spectral channels every 15 min. The system was originally developed by ESA and first launched in 1977.

Long Term Continuity: Future Systems planned for the timeframe 2020-2040:

EUMETSAT Polar System Generation Two (EPS-2G):
- EPS-2G is an improved EPS with good coverage of regions of special interest.
- EPS-2G is planned to be in orbit by 2020.

EUMETSAT Polar System (EPS):
- EPS provides operational and research services to the Member States, including products for large- and small-scale applications.
- EPS is deployed to fill the GeoCover Gap and to provide the continuity of medium- and small-scale imagery to Member States.

Continuous with Jason-3 and Jason-CS:
- Jason-3 and Jason-CS are planned to provide continuity of ocean services.
- Jason-3 is planned to be launched in March 2020.

Further in the future Jason-CS is planned to provide continuity with the Jason-4 satellite.

Climate Services:
- EUMETSAT cooperates with the European Centre for Medium-Range Weather Forecasts (ECMWF) in the Copernicus Climate Change Service.
- The Climate Service Development Plan lays out a roadmap for how EUMETSAT's climate services will develop over the next five years.

Third Party Data Services:
- EUMETSAT has been appointed as the World Data System (WDS) Data Contributor for the Earth Observation Programme of the World Climate Research Programme (WCRP). This role involves the delivery of satellite data and products to the WDS, including geostationary and polar-orbiting satellite data.
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