CGMS

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Status of EUMETSAT Satellite Application Facilities (SAFs) - Current Initiatives

This Paper presents the status of the EUMETSAT Network of Satellite Application facilities.

In June 2011, the EUMETSAT Council approved the eight proposals for a second slice of the SAF Continuous Development and Operations Phase (CDOP-2), covering the period 2012-2017. During the CDOP-2, the SAFs will continue to operationally distribute their products, to introduce new products based on data of current satellite programmes, and start preparation of new products based on MTG and EPS-SG data.

The SAF Network Support to the WMO SCOPE-CM initiative well progressed in line with the Plans for the approved Pilot Projects.

Action/Recommendation proposed:
CGMS to take note of the Status of the EUMETSAT SAF Network.

Status of EUMETSAT Satellite Application Facilities (SAFs) - Current Initiatives

1 INTRODUCTION

Since CGMS-38, the following major achievements of the SAF Network are highlighted:

Completion of the H SAF (SAF in support to Operational Hydrology and Water Management) Development Phase on 31 August 2010;
Start of the H SAF CDOP (September 2010 to February 2012) on 1 September 2010;
Smooth operations of the SAFs in the Continuous Development and Operations Phase (CDOP);
Increasing number products, especially based on EPS Data, released as "pre-operational" or "operational", and distributed via EUMETCast;
New NWC SAF, GRAS SAF and NWP SAF Software released;
Conduction of SAF workshops, namely the CM SAF workshop in September 2010 in Rostock (D) and the LSA SAF workshop in November 2010 in Toulouse (F);
Publication of a number of peer-reviewed journal articles and communications on SAF development and the usage of the SAF products and services.

The SAF proposals for the CDOP-2, submitted in December 2010, have been evaluated and amended as recommended, leading to approval by the in June 2011 at the 72nd meeting of the EUMETSAT Council, and related agreements have been signed.

The SAFs are currently completing their activities of the first slice of CDOP (by February 2012) and CDOP-2 activities will start in March 2012.

2 CONTINUOUS DEVELOPMENT AND OPERATIONS

2.1 SAF Network Phasing

The Continuous Development and Operations Phase (CDOP) activities address the continuations of the services implemented in the previous phases, but also focus on the improvement of existing products and the development of new products and services.

The approved SAFs are:

NWC SAF	SAF on support to Nowcasting and Very-short Range Forecasting;
OSI SAF	SAF on Ocean and Sea Ice;
O3M SAF	SAF on Atmospheric Chemistry and Ozone Monitoring;
NWP SAF	SAF on Numerical Weather Prediction;
CM SAF	SAF on Climate Monitoring;
GRAS SAF	SAF on GRAS Meteorology (renamed in CDOP-2 to "SAF on Radio Occultation Meteorology", ROM SAF);
LSA SAF	SAF on Land Surface Analysis;
H-SAF	SAF on Support to Operational Hydrology and Water Management.

The overall phasing of the SAF Network is recalled in Figure 1.

With the CDOP-2, all the 8 SAFs have their schedule aligned.

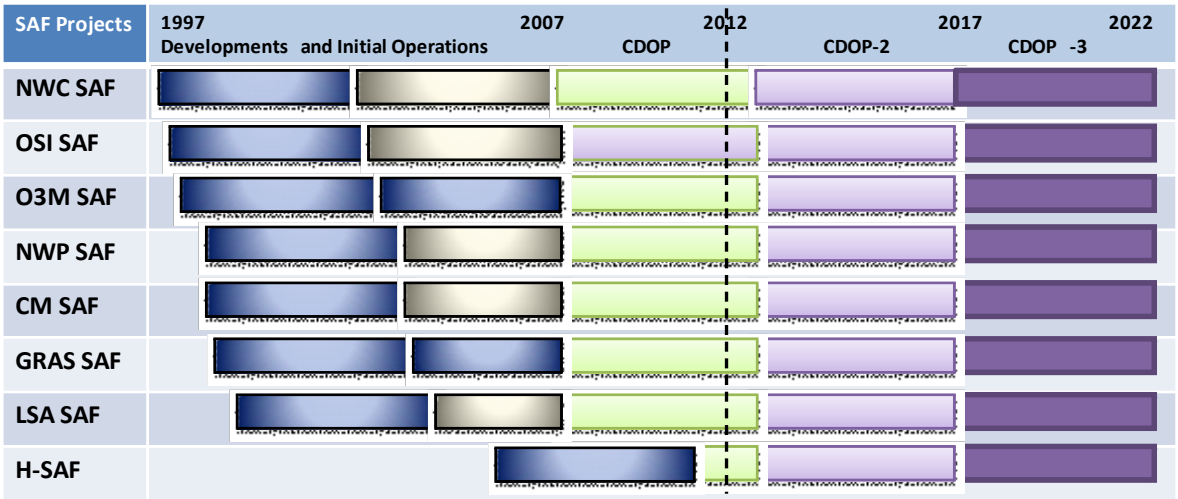

Figure 1 SAF Network Phasing and Planning: The approval of the MTG Programme provides the framework for CDOP-2 and CDOP-3 until 2022

The SAF Products currently available to Users can be found using the EUMETSAT Earth Observation Portal via the Product Navigator, for both products disseminated via EUMETCast or available via the EUMETSAT Data Centre.

2.2 Preparation for start of the SAF CDOP-2

The SAF CDOP-2 exhibits in particular:

Major improvements with respect to the current phase;
A good balance between science and engineering, between development and operational activities, as well as initial planning elements supporting the development and the study of MTG and EPS-SG based products;
Increased optimisation of the contribution of each SAF, focusing on its thematic area
Further optimisation of the cooperation of the EUMETSAT Central Application Facilities and the SAF Network;
Further optimisation of the contribution of the SAF Network to Climate Monitoring and prepare the Climate Monitoring SAF to effectively implement the objectives of the Resolution on EUMETSAT Activities in Support to Climate Monitoring (EUM/C/67/09/Res. VIII) as well as those of the WMO SCOPE-CM initiative.

2.3 SAF Network Support to WMO Sustained and Coordinated Processing of Environmental Satellite Data for Climate Monitoring (SCOPE-CM)

The EUMETSAT SAF Network continues to actively support the WMO SCOPE-CM Initiative.

The last Executive Panel Meeting took place on 29 August in Tokyo, reviewing the pilot projects status and discussing the next steps for moving to the second phase of the SCOPE-CM initiative. Running Pilot Projects are:

AVHRR based data set of cloud and aerosol properties (NOAA with EUMETSAT CM SAF);
SSM/I: total column water vapour, precipitation, liquid water path (EUMETSAT CM SAF with NOAA);
Surface albedo, clouds + aerosols from geostationary satellites (EUMETSAT Central Facilities with JMA and NOAA);
Atmospheric Motion Vectors (AMV) + clear sky radiance (JMA with EUMETSAT Central Facilities and NOAA);
Upper troposphere humidity (NOAA with JMA, EUMETSAT Central Facilities and CM SAF).

The CM SAF leads the Pilot Project 2 on SSM/I data and participating in two additional ones (AVHRR clouds, Upper Tropospheric Humidity). The CM SAF is also prepared to take over sustained responsibilities in the Second Phase of SCOPE-CM, using the dedicated resources foreseen in the SAF CDOP-2 plan of work.

3 CONCLUSION

CGMS is invited to take note of the status of the EUMETSAT SAF Network.