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Prepared by EUMETSAT  
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## **STATUS OF THE EUMETSAT SATELLITE APPLICATION FACILITIES**

This paper presents the status of development/operations of the EUMETSAT Network of Satellite Application Facilities (SAF) and provides the relevant medium/long-term planning elements.

## **PLANS FOR METEOSAT THIRD GENERATION**

### **1 INTRODUCTION**

This paper presents the status of development/operations of the EUMETSAT Network of Satellite Application Facilities (SAF) and provides the relevant medium/long-term planning elements.

There are currently 8 SAF project running (see figure 1), at different status of development or operations:

- SAF on Support to Nowcasting and Very Short-Range Forecasting (NWC);
- SAF on Ocean and Sea Ice (OSI);
- SAF on Ozone Monitoring (O3);
- SAF on GRAS Meteorology (GRAS);
- SAF on Numerical Weather Prediction (NWP);
- SAF on Climate Monitoring (CM);
- SAF on Land Surface Analysis (LSA);
- SAF on Support to Operational Hydrology and Water Management.

### **2 STATUS OF ACTIVITIES**

Eight SAFs are currently in Development or already in Initial Operations, covering eight “themes” agreed to by the EUMETSAT Council. Each theme addresses operational meteorology, observation of climate relevant parameters and other disciplines.

During the Initial Operations Phase (IOP), which ends in February 2007, the SAFs on Nowcasting and Very Short Range Forecasting (NWC), Climate Monitoring (CLM), Ocean and Sea Ice (OSI), Land Surface Analysis (LSA) and Numerical Weather Prediction (NWP) started the first set of operational services and implemented user services (e.g., helpdesks, web pages) and the organisation of user workshops.

Large parts of the activities in the IOP were/are dedicated to the scientific validation of the operational products, which is actively supported by users of the SAF operational services.

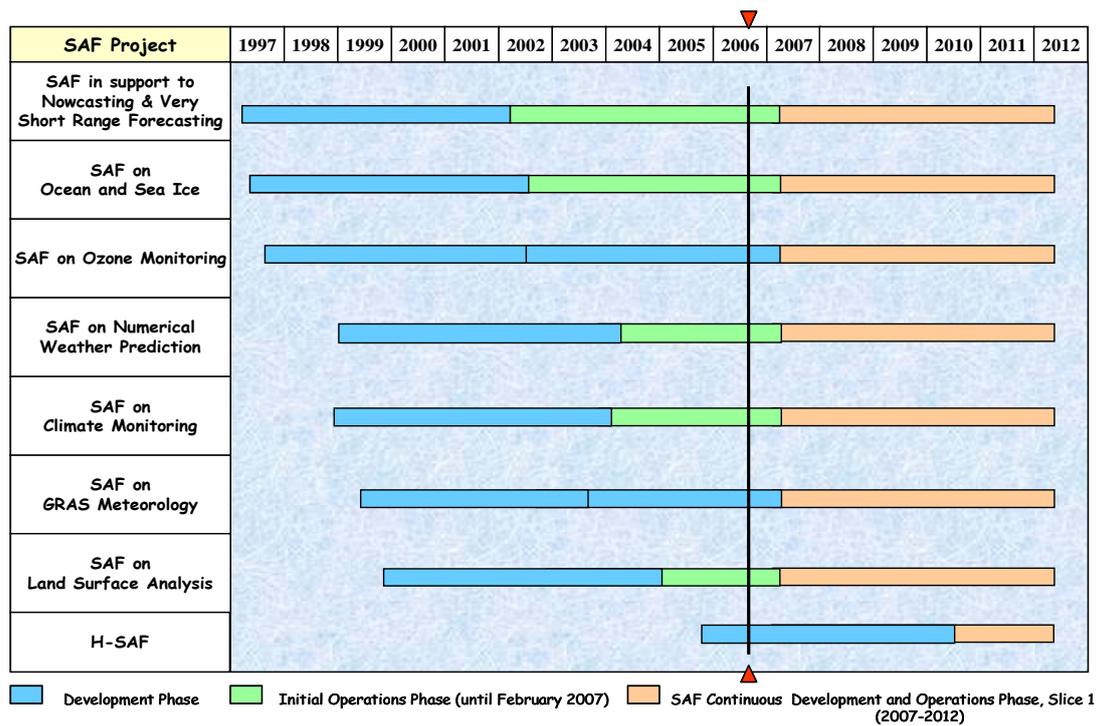
The first set of near real time SAF products are distributed via EUMETCast, the satellite dissemination service of EUMETSAT, to a growing number of users in the domain of meteorology and beyond. Table 1 provides an overview of the current status of SAF products and services. The table demonstrates that the relevant SAFs used very successfully the learning phase of the IOP to bring the majority of the planned products into operations (operational or pre-operational status) already before the completion of the IOP. Figure 1 presents the overall SAF Network planning.

Currently, the five SAFs in IOP together with the SAFs on GRAS Meteorology and Ozone Monitoring are preparing the next SAF phase covering the period from March 2007 to February 2012. This phase, called the Continuous Development and Operations Phase (CDOP), will address the continuation of the services implemented in the IOP and in the

Development phase but also focus on the improvement of existing products and the development of new products and services.

SAFs are already supporting each other via the exchange of products and expertise, as well as keeping a close contact between SAF managers and scientists.

The CDOP would offer many opportunities to continue and expand the inter-SAF activities for the benefit of the whole SAF Network and its user communities.



**Figure 1** SAF Network Phasing and Planning

	NWC	OSI	CM	LSA	NWP	O3M	GRM	HSAF
	Support for Nowcasting and Very Short Range Forecasting	Ocean and Sea Ice	Climate Monitoring	Land Surface Analysis	Numerical Weather Prediction	Ozone and Atmospheric Chemistry Monitoring	GRAS Meteorology	Support to Operational Hydrology and Water Management
Year of IOP	5	5	3	2	3			
Year in (Extended Development) Phase						5	3	2
<b>Number of Products</b>	<b>16</b>	<b>10</b>	<b>21</b>	<b>19</b>	<b>15</b>	<b>11</b>	<b>28</b>	<b>10</b>
<i>operational</i>	NRT		8		3			
	off-line			11	3			
	software	16				15		
	<b>total</b>	<b>16</b>	<b>8</b>	<b>11</b>	<b>6</b>	<b>15</b>	<b>0</b>	<b>0</b>
<i>pre-operational</i>	NRT		1		2			
	off-line			9	2			
	software							
	<b>total</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>in development</i>	NRT		1		9	5	11	
	off-line			1		6	14	10
	software						3	
	<b>total</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>11</b>	<b>28</b>
<b>Product Dissemination</b>								
	EUMETCast		X		X			
	Web / FTP		X	X	X			
<b>Number of Users</b>	<b>22</b>	<b>60</b>	<b>51</b>	<b>140</b>	<b>228</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>User services</b>								
	Helpdesk	X	X	X	X	X		
	Webpage	X	X	X	X	X	X	X
	Training	X	X	X	X	X	X	X

Total number of Operational Products (3<sup>rd</sup> Q 2006): 56

Total number of Pre-operational Products (3<sup>rd</sup> Q 2006): 14

**Table 1: Current Status of the SAF products and services**

The SAF Network Continuous Development and Operations Phase (CDOP), for the period 2007-2012, will cover:

- Completion of EPS-based products validation, using real EPS/Metop Data;
- Continuation, with necessary improvement, of the operations of MSG, NOAA based products (or products based on other approved data sources);
- Operation of EPS-based products and their extended validation, in line with agreed planning elements;
- Development and operation of new products, as agreed by Council;
- Support to the identification and definition of requirements for Post-MSG and Post-EPS, and scientific preparation for the use of data of the future EUMETSAT satellite systems, to the extent required by related plans

### 3 MEDIUM/LONG-TERM PLANNING

The following main planning elements are applicable to the SAF Network:

SAF CDOP: 2010-2012

Following CDOP slices: 5 years, first starting in March 2012

#### **4 CONCLUSIONS**

CGMS is invited to take note of the progress of activities and operations of the SAF Network at EUMETSAT.

Detailed information on the status of the SAF projects and of distributed products is available on the EUMETSAT Web.