The EUMETSAT Network of Satellite Application Facilities

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SAF concept

EUMETSAT SAF
SATELLITE APPLICATION FACILITY NETWORK

- SAF = **Satellite Application Facility**
- part of the EUMETSAT application ground segment
- providing operational products and services to users
- specialised on topics and themes
- complement production of standard meteorological products at EUMETSAT Secretariat
- located at Weather Services in EUMETSAT Member and Co-operating States
- developed and operated by consortium of partners

SAF Network and the EUMETSAT Strategy 2025

"The EUMETSAT network of Satellite Application Facilities: a strategic asset

EUMETSAT will maintain the networked architecture of its applications ground segment, involving central facilities in Darmstadt and eight SAFs distributed across its Member States,

- each specialised in one application area,
- in order to develop and deliver innovative environmental products that realise the full potential of space-based observations in the broadest possible range of existing and emerging applications,
- this allows the **best use of infrastructure** and resources available in Member States, capitalising on **scientific expertise**, close interactions with **application experts** and **cross-network cooperation**.

EUMETSAT's mandatory programmes shall accordingly provide sustained funding for the successive five-year Continuous Development and Operational Phases (CDOP) of all SAFs."

SAF Network and the EUMETSAT Strategy 2025

- *Atmosphere, ocean, ice and land surfaces: a seamless portfolio of observational products*
  - *Considering increasing integration of services (weather, marine, air quality), coverage (local, regional, global – NRT to climate)*
  - *Achieved through **optimum combination of observations** (GEO + LEO, EUMETSAT and Partner missions, EUM Central Facilities and SAFs)*
- *Infusing science to deliver more and better observational products*
  - *Evolution of the EUMETSAT product portfolio through advances in science and remote sensors and in response to **continuously evolving user requirements***
- *Facing the "big data" challenge*
  - *EUMETSAT will establish a roadmap of pathfinder projects for future data services, starting with an assessment of the relevance of cloud technology and other "big data" concepts and technologies for its wide spectrum of data access requirements, including time-critical data services as far as possible. This assessment will address performance, end-to-end service level commitment, flexibility, continuity of service, accessibility to a scattered user community, IT security, compliance with policy requirements, in particular data policy and procurement policy, and development and running costs. This assessment will also involve the SAF network.*

SAF Network and the EUMETSAT Strategy 2025

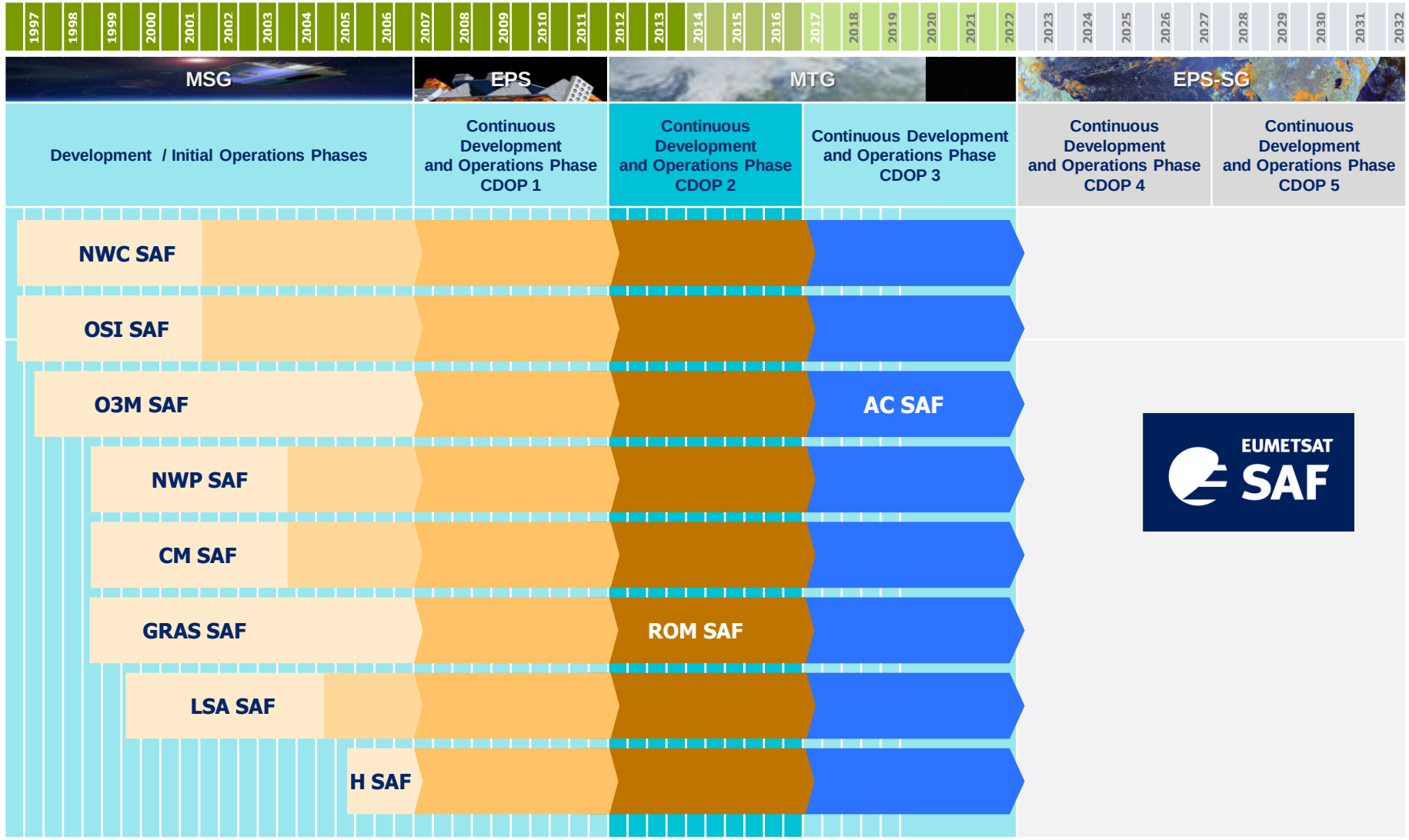
- *Continuity of service and cost-effectiveness will remain major drivers*
  - For the development and delivery of new products, a cost effective balance will be sought between the contributions of EUMETSAT Central Facilities and the SAF network, along with the best possible quality of the products generated
- *Timely delivery of new generation satellite systems*
  - The "Day 1" environmental products of both systems will be developed through an optimal distribution of tasks between the EUMETSAT central facilities and relevant SAFs
  - While ensuring that the best possible science is used to prepare for the use of the new generations of satellites, EUMETSAT will continue to invest in its central facilities and in SAFs to secure the continuous improvements of the products generated from the current generation of satellites
- *Planning the optimum deployment of recurrent MTG and Metop-SG satellites*
  - Deployment of "Day 2" products in cooperation with the Network of SAFs and Copernicus

SAF Network and the EUMETSAT Strategy 2025

- *Training and User Preparedness*
  - EUMETSAT's contribution to training will remain part of an integrated cooperative effort, mobilising expertise and resources across partners, in particular within the EMI through EUMETCAL, the training co-operation programme between the national meteorological and hydrological services (NMHS) in Europe. This involves an international network of experts on satellite products, applications and techniques for using satellite data, across the network of SAFs, the NMHSs and the relevant WMO programmes, including the Virtual Laboratory (VLab).

- *Contribute to global partnerships of relevance to monitoring of weather, climate and environment from space*
  - In relation to the GFCS, EUMETSAT will continue to support the Global Climate Observing System (GCOS), the Sustained, Co-Ordinated Processing of Environmental Satellite Data for Climate Monitoring (SCOPE-CM) initiative and the Global Space-based Inter Calibration System (GSICS), with the support of its network of SAFs.

Temporal perspective of the SAF Network

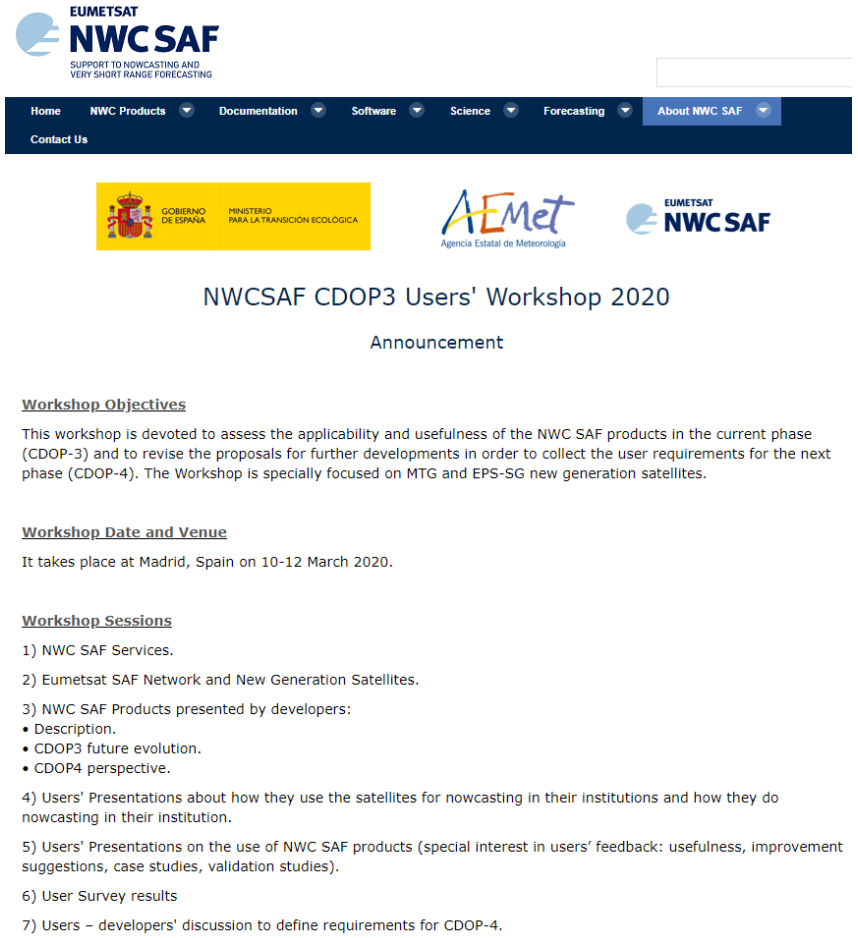


Your time window…..

- All SAFs are preparing their proposals for the next Phase CDOP 4 covering 2022-2027
- Special attention given to time critical meteorological application: Nowcasting and NWP.
- As user driven elements of a user driven organisation (EUMETSAT): the SAFs need your input, your expectations, your needs, your requirements.
- Proposal submission End of October 2020

Effective means to capture and document requirements / support

- SAF Workshops
- Direct contacts with (potential) priority users (also within the consortium!)
- Other workshops working groups (formal recommendations)
- Interaction with the related EUMETSAT Secretariat activities (MTGUp! EPS-SGUp! Training etc.)
- Social media
- Support letters (specific to SAF, specific to users application, readiness/commitment to use)



EUMETSAT NWC SAF
SUPPORT TO NOWCASTING AND VERY SHORT RANGE FORECASTING

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NWCSAF CDOP3 Users' Workshop 2020

Announcement

Workshop Objectives

This workshop is devoted to assess the applicability and usefulness of the NWC SAF products in the current phase (CDOP-3) and to revise the proposals for further developments in order to collect the user requirements for the next phase (CDOP-4). The Workshop is specially focused on MTG and EPS-SG new generation satellites.

Workshop Date and Venue

It takes place at Madrid, Spain on 10-12 March 2020.

Workshop Sessions

1) NWC SAF Services.

2) Eumetsat SAF Network and New Generation Satellites.

3) NWC SAF Products presented by developers:
- Description.
- CDOP3 future evolution.
- CDOP4 perspective.

4) Users' Presentations about how they use the satellites for nowcasting in their institutions and how they do nowcasting in their institution.

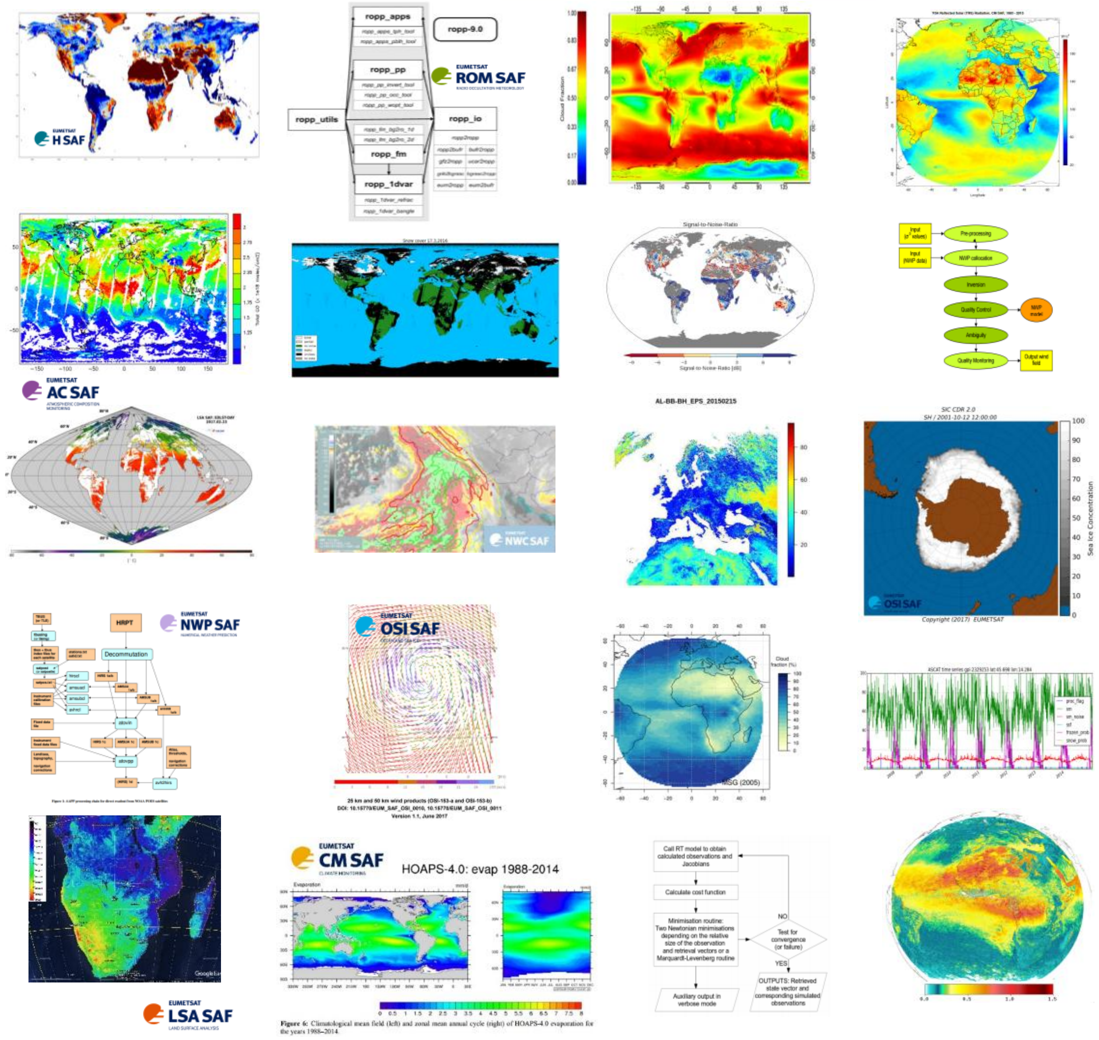
5) Users' Presentations on the use of NWC SAF products (special interest in users' feedback: usefulness, improvement suggestions, case studies, validation studies).

6) User Survey results

7) Users – developers' discussion to define requirements for CDOP-4.

Connect to the SAFs

EUMETSAT SAF



EUMETSAT NWC SAF SUPPORT TO NOWCASTING AND VERY SHORT RANGE FORECASTING

EUMETSAT AC SAF ATMOSPHERIC COMPOSITION MONITORING

EUMETSAT ROM SAF RADIO OCCULTATION METEOROLOGY

EUMETSAT LSA SAF LAND SURFACE ANALYSIS

EUMETSAT NWP SAF NUMERICAL WEATHER PREDICTION

EUMETSAT H SAF SUPPORT TO OPERATIONAL HYDROLOGY AND WATER MANAGEMENT

EUMETSAT CM SAF CLIMATE MONITORING

EUMETSAT OSI SAF OCEAN AND SEA ICE

SAF Web pages:
http://www.eumetsat.int
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What can you do?

Use the unique opportunity (time window) to have the expectations, wishes, needs and requirements of you, your service, your country the best possible impact on SAF operational services for 2022-2027 and beyond.

Help the SAFs to help you!