



Atmosphere Monitoring



Climate Change

**Copernicus Climate Change and Atmosphere
Monitoring services:**

NATIONAL COLLABORATION PROGRAMMES

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Thematic Collaborations



CAMS

National Collaboration Programme



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Application areas
KCEO / Thematic Hubs

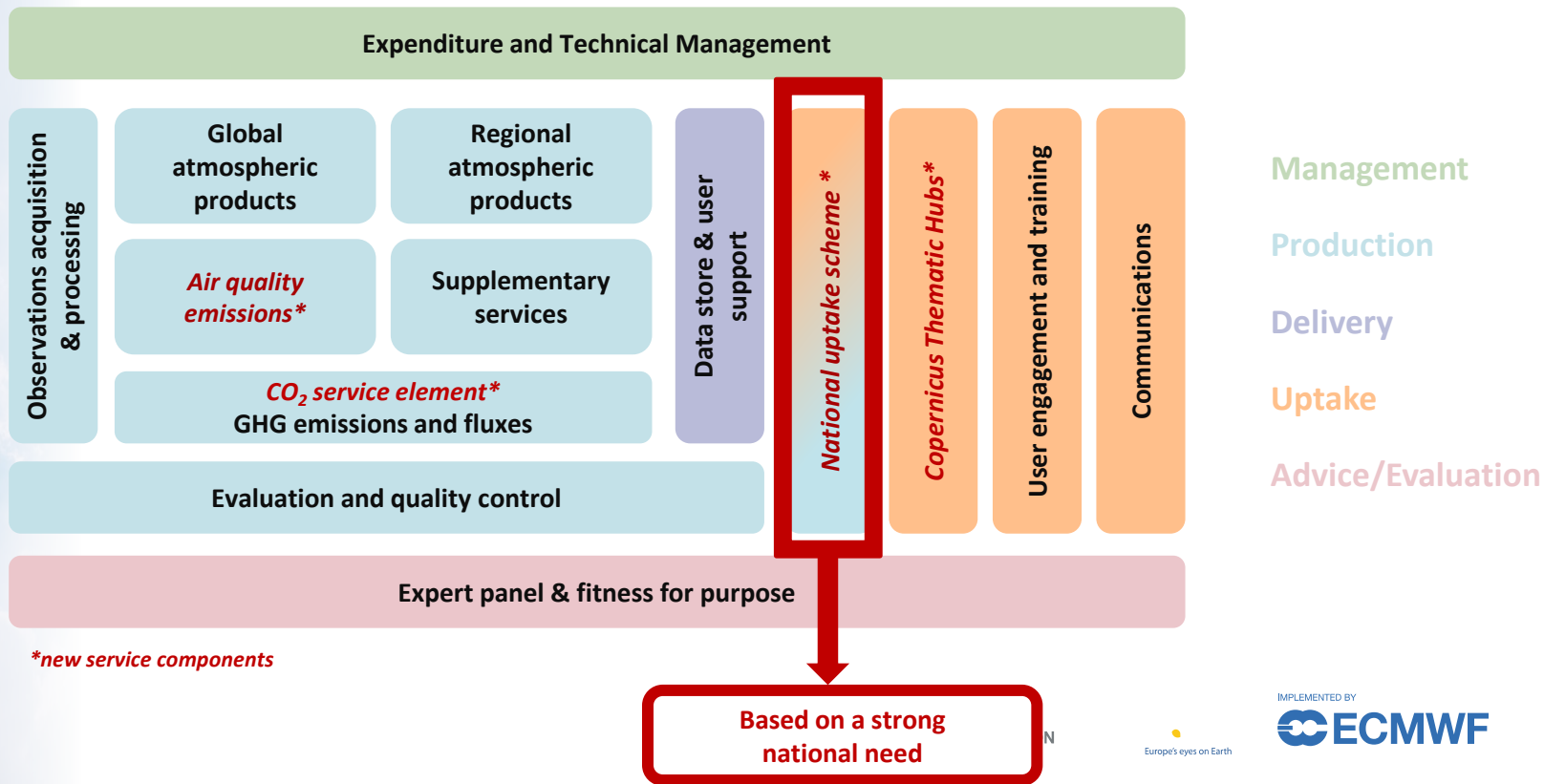


Countries
Nat. Collab.
Programme

Expertise domains
Copernicus Services



CAMS ARCHITECTURE





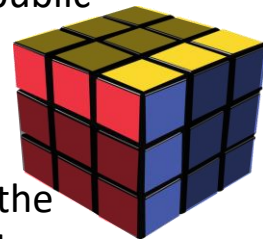
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National Collaboration Programme



New approach to the Copernicus national institutional users

- to enhance the uptake of CAMS products at national level by **co-designing and co-developing joint activities**
- to assess the quality and fitness for purpose of CAMS products over national domain (**user feedback & user needs**)
- to provide a gateway to reach the general public at national level and in **national language (communication)**



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CAMS National Collaboration Programme

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THE MAIN OBJECTIVES | THE ONGOING PROCESS | INVOLVED COUNTRIES | MODULES

3rd Atmosphere User Forum meeting
Forum to discuss

The European Centre for Medium-range Weather Forecasts (ECMWF) and Copernicus Atmosphere Monitoring Service (CAMS) National Collaboration Programme (NCP) is a dedicated scheme to support EU Member States in increasing the maximum benefit from CAMS products and services during the implementation of their mandate. The NCP is an initiative of ECMWF, endorsed by the European Commission, and is based on a strong need for collaboration at national level detected over the past years.

With this initiative ECMWF supports national institutions to improve their uptake and use of CAMS products in support of air quality policies and dust monitoring objectives and in further phases, providing support to climate mitigation actions via monitoring and verification of CO₂ and other GHG emissions.

The CAMS NCP programme runs until 2027 with tangible actions co-designed with national institutes in a thoroughly collaborative spirit.

The main objectives

Involved countries

Italy Norway Poland Sweden

Modules

- ✓ CAMS products to support regulatory reporting
- ✓ Direct use of CAMS products at national level
- ✓ CAMS air quality products downscalated at national level
- ✓ Exploitation of the CAMS emission data set at national level
- ✓ Support monitoring to in-situ network
- ✓ Communication about CAMS at national level
- ✓ Training and knowledge transfer

- Is a priority for CAMS2.0, **with 16M€** carved in the budget to allow **all the countries** to be involved
- NCP web site with countries contributions
- Community of Experts: **Atmosphere User Forum**



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Europe's eyes on Earth

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Each project is unique for each country, based on a “menu” of optional activities that have been decided together with the country. **Communication is mandatory.**

Within the WP, detailed tasks are specific for the country but there will be commonalities so that countries involved can share experience.

CAMS NCP Work Wackages

- a. Reporting
- b. Direct use of CAMS products
- c. Air quality downscaling over country
- d. Emissions
- e. Support monitoring to in-situ network
- f. Communication
- g. Training

COUNTRY	WP1 reporting	WP2 direct use	WP3 downscaling	WP4 emissions	WP5 in situ support	WP6 Communication	WP7 Training
DENMARK		x	x			x	x
ITALY		x	x	x		x	x
GERMANY		x	x	x		x	
FRANCE	x		x	x		x	
THE NETHERLAND			x			x	
SWEDEN		x	x			x	
POLAND		x	x	x		x	
NORWAY	x	x		x	x	x	
BULGARIA		x	x			x	
ICELAND					x	x	x
SPAIN		x				x	x
HUNGARY		x				x	
AUSTRIA	x	x	x			x	
GREECE			x		x	x	
FINLAND		x	x		x	x	
SLOVAKIA	x	x	x			x	
SLOVENIA		x	x	x		x	



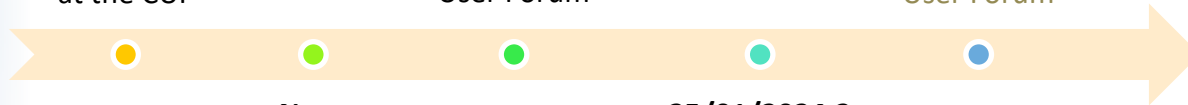
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Roadmap and countries participation

December 2021: 1st NCP presentation at the CUF

14 June 2023: 1st Atmosphere User Forum

11 June 2024: 3rd Atmosphere User Forum



November 2022: 1st

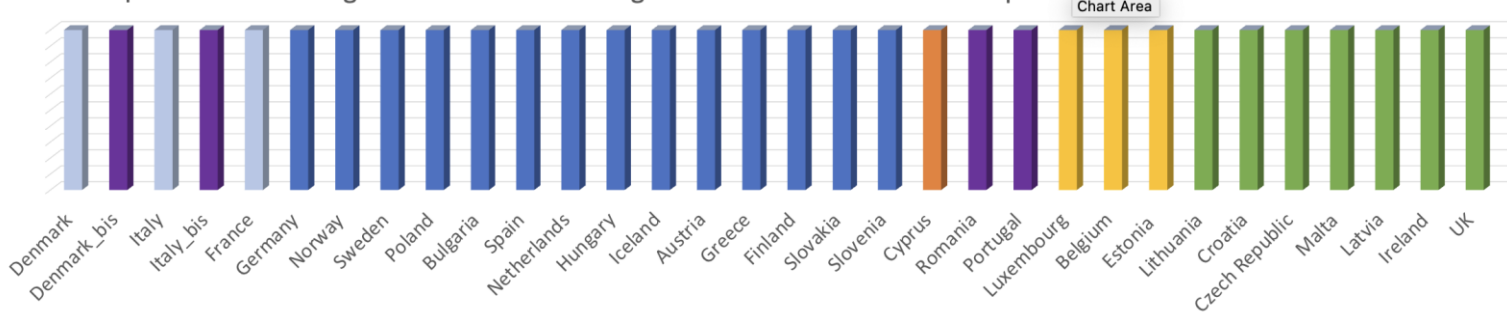
1st phase: 2022-2023
15 (+3) contracts
Duration: 18 months
Budget: 80K€ per year

25/01/2024: 2nd Atmosphere User Forum
(21 speakers; 105 representatives from 23 countries)

2nd phase: 2024-2027
New contracts starting in 2024 + re-newed contracts
Duration: variable, till the end of 2027
Budget: around 120K€ per year

MSs Participation

■ Signed contract ■ In negotiation ■ RfP sent ■ RfP planned ■ Interested ■ Ended contract





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C3S National uptake



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C3S National Uptake actions

C3S User Intelligence:

- User Interaction sessions with **National institution(s)**
- **DG CLIMA Policy Workshops**

1. User
Intelligence
and User
Uptake
sessions

2. Actions
on National
Uptake for
Core Users

4. Applicati
ons and
Workflows
on demand

3. Training &
knowledge
transfer

- **Survey CUF** + follow-up interviews
- Support for **Joint Coordination Office C3S NCP**
- **Calls for C3S NCP actions**

Starts Q3-Q4 2024, based on **identified key users needs**

- **Training Events**
- **Mini MOOC**
- **Roster of experts**



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2. Support for Joint Coordination Office C3S NCP

- Primary goal: **engage with public authorities and climate specialists at national level with all countries**
- Main objectives:
 1. to facilitate dialogues amongst all countries, to raise awareness on the C3S service offer and its evolution, to discuss gaps and to enhance cohesion on the applicability of C3S data and products at both national and transboundary level – **C3S NCP Forum**
 2. To co-design, together with national users, topics for actions - **bilateral interactions**

2. C3S National Collaboration Programme goals & strategy

What we want to achieve with this programme:

- ✓ **Increase the uptake** of C3S products and services
- ✓ **Raise awareness and capacity building** at national/sub-national level
- ✓ Collect **feedback** on C3S products and new requirements



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From the survey to the call for actions

2. Actions on National Uptake for Core Users



Joint Coordination Office
NCP Forum



National needs
(from the survey)



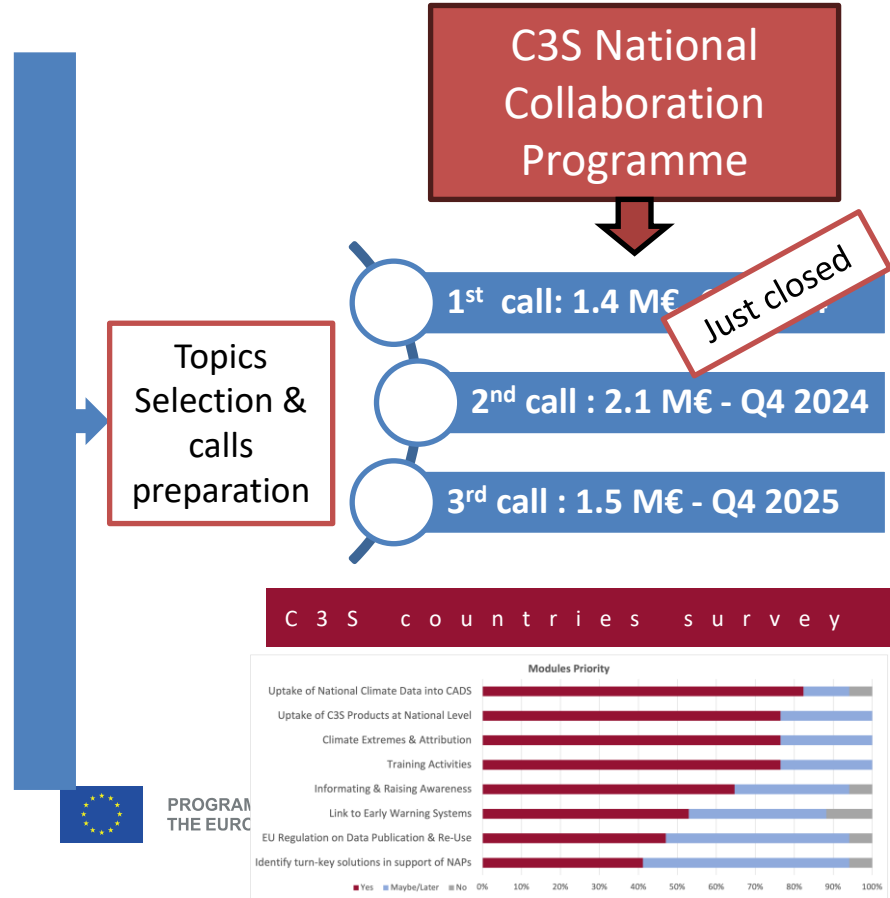
Needs collected through the
User Interaction sessions



On-going C3S studies (e.g.
regional reanalysis)



C3S strategic priorities





Final remarks

- ✓ NCP is a challenging and completely new service element for both services, requiring efficiency and scalability
- ✓ great **willingness of MSs to participate** (C3S: 17 survey responses, CAMS: 17 on-going contracts- soon 18)
- ✓ **Modular approach** with different modules/ products and batches of call for actions to allow more **flexibility in term of objectives and time**
- ✓ Importance of the **Impact and Sustainability** of the project at national level (long-term perspective and national follow-up) and **Communication**
- ✓ Importance of the **co-designed & co-developed** approach; capacity building and capacity development; manage expectations from the countries
- ✓ Creation of 2 **Communities of Experts**
 - ✓ **Atmosphere User Forum** (<https://atmosphere.copernicus.eu/3rd-atmosphere-user-forum>)
 - ✓ **C3S NCP Forum** (<https://climate.copernicus.eu/first-c3s-national-collaboration-programme-forum>)

Final remarks





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*Thank you for your
attention!*

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