COPERNICUS MARITIME SURVEILLANCE

CMS OVERVIEW



COPERNICUS AND CMS

Copernicus is the Earth Observation component of the European Union's Space Programme which looks at our planet and its environment for the benefit of all European citizens.

Copernicus Maritime Surveillance (CMS) service forms part of the security component of Copernicus. It operates under restricted access which is granted to authorised users. CMS is activated upon user request.

Funded by the EU, CMS is available to authorised users free of charge.

WHAT DOES CMS SERVICE PROVIDE?

A comprehensive maritime picture assisting the end-user's decision-making in everyday operations.



EO images and value-added products in quasi-real time to support the end-user's maritime operations by monitoring human activity at sea.

Radar (SAR) Satellites

- Access to 5 satellite missions
- Resolution: ≤1m ≤100m
- Not affected by weather and cloud cover
- Reflective objects (vessels, installations) are visible as bright spots
- Oil spills and low wind areas appear as dark patches

HOW TO ACCESS THE CMS?

The service is provided through EMSA's maritime portal and to access it, users:

- need to have an account to the EMSA portal¹
- must complete a User Registration form and send it to the CMS team²

Optical Satellites

- Access to 4 satellite missions
- Resolution: 30cm to 1.5m
- Easy image interpretation and object identification due to true colour images
- Affected by cloud coverage
- Dependent on sunlight

WHO IS THE CMS COMMUNITY?

National authorities of the EU Member States and EFTA³ countries with responsibilities at sea.

EU institutions and bodies.

International organisations, (subject to European Commission authorisation)

...CAN ACCESS THE SERVICE THROUGH

Routine request Short-notice request









CMS OVERVIEW



FUNCTION AREAS

CMS PRODUCTS

Image products: Synthetic Aperture Radar (SAR) images and Optical images

Value-added products: vessel detection service (VDS), feature detection service (FDS), oil spill detection and possible polluter identification (OSN), activity detection service (ADS), change detection service (CDS), wind and wave information, correlation with vessel reporting information.

KEY FACTS ABOUT CMS

- Global coverage
- 2 Registered Organisations
- Access to a wider range of SAR and optical missions.⁵
- 332 million km² monitored⁶
- 7015 image products delivered⁶
- Delivery timeline: less than 20 minutes⁷

emsa.europa.eu/copernicus

Get in touch for more information

Copernicus Maritime Surveillance Service

Twitter CopernicusCMS / Instagram CopernicusCMS copernicus@emsa.europa.eu

Copernicus

Twitter CopernicusEU / Facebook CopernicusEU

European Maritime Safety Agency

Linkedin EMSA / Twitter/X EMSA_EU Facebook EMSA / Instagram EMSA emsa.europa.eu

CREDITS

Header image: © EMSA (2023) © CNES (2023), Distribution Airbus DS

REFERENCES

²coperniucs@emsa.europa.eu

³ European Free Trade Association

- $^{\rm 4}$ European Commission Directorate-General for Defence Industry and Space $^{\rm 5}$ Reported in 2023
- ⁶Reported in 2022

 $^7\mbox{Delivery}$ time varies in terms of satellite overpass period, image size and product complexity

This document was produced with funding by the European Union. Views and Opinions expressed are however those of the author only and the European Commission cannot be held responsible for any use which may be made of the information contained therein.