



## OVERVIEW

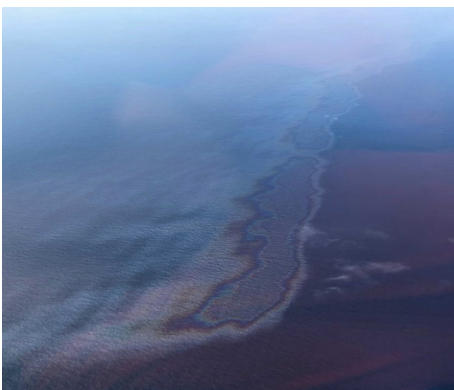
The Copernicus Maritime Surveillance (CMS) service provides satellite-based data to detect illegal ship-sourced discharges (e.g. of oil), to identify polluting vessels and to track the evolution of accidental spills. The service is provided in areas of European interest outside European waters such as overseas territories of EU states.

Spills from vessels, offshore platforms and oil pipelines can severely pollute marine and coastal habitats causing damage to the natural environment and the economy. Oil pollution from vessels and platforms is usually either a result of deliberate operational discharges or because of accidental spills. Rapid detection and early warning of marine oil spills allow national and regional coast guard authorities to catch polluters in the act of illegal discharges, and to respond quickly to emergencies in the case of large accidental spills.

Satellite-based synthetic aperture radars (SAR) consist of surveillance systems capable of monitoring all-weather, day and night, wide areas at regular intervals. SAR satellite images

are appropriate for detecting possible illegal discharges from ships (oil and similar substances); since discharges appear as long, linear dark shapes, while vessels and oil platforms appear as bright white spots.

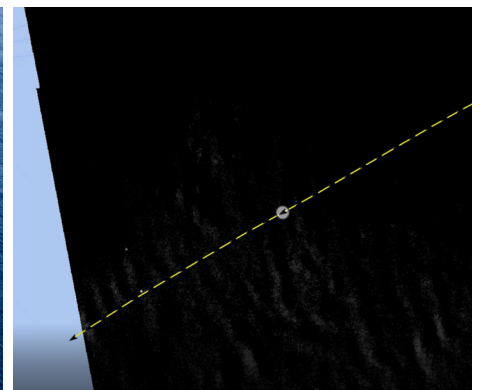
CleanSeaNet, the European oil spill monitoring and vessel detection service operated by EMSA since 2007, combines SAR and optical data with other kinds of information (e.g. ship tracking data) to identify the potential polluters, and provides relevant authorities with valuable information to take further action. Through Copernicus, this service is extended to new geographic areas of European interest, for example overseas territories of EU states.



Rapid detections lead to improved responses



Airplanes verify data provided by satellites



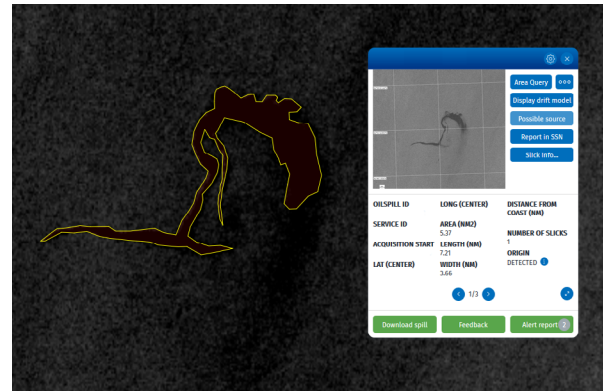
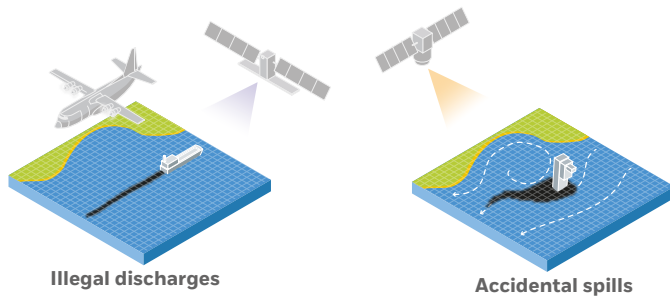
Vessel tracks can lead to the oil spill's source



## OVERVIEW

CMS SUPPORTS POLLUTION MONITORING IN AREAS OF EUROPEAN INTEREST THROUGH:

- detection and tracking of illegal ship-source pollution
- identification of possible polluters by combining information on oil spill detections with information on vessel positions and routes
- monitoring the extent and spread of oil over time following a large-scale accident



Oilspill detected in a SAR image



Discharges often appear as long and linear dark shapes

[emsa.europa.eu/copernicus](https://emsa.europa.eu/copernicus)

### Get in touch for more information

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