

OIL SPILL IN THE MEDITERRANEAN

What it is about

The Mediterranean Sea is both one of the world's most sensitive marine environments and one of the busiest shipping lanes in the world. It is estimated that around 30% of all the world's oil passes through the narrow straits of Gibraltar, the Suez Canal or the Bosphorus, with most of this passing close by the shores of Malta. Accidents are rare, but ships captains save time and money by illegally washing their tanks whilst sailing. The consequent pollution causes considerable environmental damage to the marine ecosystem and leaves traces of oil on beaches otherwise enjoyed by bathers and holiday makers.

National authorities are responsible for monitoring their own waters, but they are helped in this by the CleanSeaNet (CSN) service operated by the European Maritime Safety Agency (EMSA). CSN uses Sentinel-1 and other data to identify potential oil slicks and possible polluters and, in a matter of minutes, transfer this information to the national competent authorities such as SASEMAR in Spain and Transport Malta. The increased risk of detection and successful prosecution is deterring ship's captains from washing out their tanks and oil spills were reduced by up to 65% in the last 10 years.



What we found

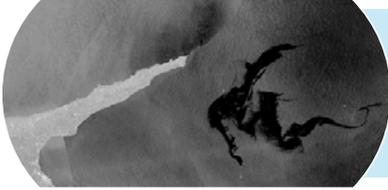
- The European-wide CleanSeaNet service enables coastal states to detect possible oil slicks in their maritime zones.
- It helps them use their marine patrol aircraft more efficiently and significantly reduces overall costs by providing the service at European level.
- The risk of detection has reduced the number of oil-slicks by up to 65% in the last 10 years as CSN has achieved wider and more regular coverage through the use of imagery from Sentinel 1.
- The reduction of the amount of oil entering the marine environment is a critical goal to maintain the sensitive marine ecosystem.

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The Satellite Data

Copernicus Sentinel-1 provides free-of-charge frequent, all-weather, day-and-night C-band radar images all over Europe and the Mediterranean Sea.



The Service Provider

The European Maritime Safety Agency (EMSA) improved coverage at reduced cost of the CleanSeaNet service together with a much comprehensive service.

✓ €27.6m-56.2m pa



The Primary User

Significant cost savings by coastal states and more efficient use of their marine patrol aircraft.

✓ €12.8m-22.4m pa



Secondary Beneficiaries

CleanSeaNet helps local authorities monitor and protect other assets such as fish farms and oil terminals.

✓ €320K-480K pa



Citizens and Society

Citizens enjoy cleaner beaches and bathing waters as well as protection of businesses concerned with fishing and tourism.

✓ €1m-2m pa

Total benefits

Economic



Environmental



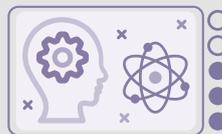
Innovation



Regulatory



Science & Tech



Societal



✓ €41.7m-81.1m p.a.

About the project

Through a series of case studies, EARSC aims to gather quantitative evidence that the usage of Copernicus Sentinel data provides an effective and convenient support to various market applications. These studies are undertaken in the frame of the project "Showcasing the benefits brought by

the usage of Sentinels data to society, environment and economy: a bottom-up assessment based on traceable impacts along selected value chains", under an assignment from the European Space Agency (ESA) funded by the European Union as part of the Copernicus Programme.

Download the full report from the project website



<http://earsc.org/sebs>

