



PROGRAMME OF
THE EUROPEAN UNION

LIFE BELOW WATER

SUSTAINABLE DEVELOPMENT GOAL

14



SUSTAINABLE
DEVELOPMENT
GOALS

The European Union is committed to implement the 2030 Agenda for sustainable development, both in its internal and external policies. Discover how the European satellite navigation and Earth Observation systems can contribute and support each SDG. Through its marine environment monitoring service, Copernicus provides regular and systematic information about the physical state and dynamics of ocean and marine ecosystems, based on satellite and in situ observations. This data makes it possible to both analyse the current situation and to forecast the situation for the days to come. The service also calculates and provides products describing temperature, wind salinity, sea level, sea ice, etc. The use of satellite navigation in marine environments enables discoveries that older technologies could not achieve. Galileo can play an instrumental role in the deployment of innovative applications for mapping and measuring of marine environments and for facilitating maritime activities.



OCEAN HEALTH

Global forecasts provided by the Copernicus marine service are used to monitor oil pollution in the seas. Copernicus applications help governments in identifying the sources of oil pollution in the sea.

Monitoring, based on Copernicus ocean model currents and sea level satellite maps, can locate plastic debris trapped in oceanic eddy structures.

Copernicus operates the Arctic Ocean forecasting centre to closely monitor the polar areas and the effects of climate change on the sea-ice extent and thickness, icebergs concentration and changes in temperature or salinity affecting the ocean circulation and the overall weather.



MONITORING OF PROTECTED MARINE AREAS

Galileo applications facilitate control and access to protected marine areas, as well as reducing the cost of control for management operators.

The Copernicus Marine Service collects and combines data related to sea surface temperature and currents, ocean colour data, in situ data and other kinds of data. Discover the annual Ocean State Report that provides a regular assessment of the changes and variation in the ocean with a focus on changes in the maritime environment.



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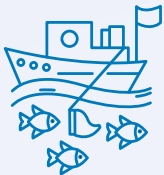


EU SPACE FOR SUSTAINABLE FISHERIES

Copernicus satellite imagery, combined with information from vessel positioning from Galileo, monitor activities of fishing vessels at sea to detect and deter illegal, unreported and unregulated fishing practices.

Thanks to Galileo, data can be provided to fishing authorities on the location, speed and course of fishing vessels operating in Europe, allowing authorities to detect and track movement and activity in restricted fishing grounds.

- In the EU, about 9000 fishing vessels are equipped with a satellite-based device (VMS) providing data to fishery authorities to support enforcement efforts. Copernicus Earth Observation data help anglers and aquafarmers to require accurate real time and forecasts information on fish growth rates and fish health.
- For example, the 20% economic losses undergone by the EU mussels industry in 2017 due to the climatic conditions could have been reduced to 10% if using Earth Observation data.



ABOUT EU SPACE PROGRAMME

Space applications play key roles in our daily life activities. The EU space programme enables solutions to tackle global challenges such as sustainability and climate change, safety and security, emergencies and mobility. The EU's flagship space programmes foster innovative services that meet the needs of users worldwide.

COPERNICUS is the EU's Earth Observation system: free, full and open access satellite data used to provide services in six areas: land monitoring, marine environment monitoring, atmosphere monitoring, climate change, emergency management and security.

GALILEO is the EU's global navigation satellite system, providing accurate positioning and reliable timing information. Galileo services are widely used by people and businesses, for example in transport, agriculture, health, finance and energy networks, search and rescue and emergency response.

EGNOS is the EU's regional navigation system. EGNOS services are used in safety-critical applications in aviation, maritime and land-based uses in most of Europe.



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#EUSpace #CopernicusEU #UseGalileo #EGNOS