

Marine Conservation and Copernicus

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Brussels, 24/01/2019



SCIAENA - We are an Environmental Non-Governmental Organization (ENGO) created in 2006 in southern Portugal

Vision – A healthy marine environment and an informed population engaged in its conservation.

Mission – To promote the improvement of the marine environment by encouraging the sustainability of fisheries and other forms of use and minimizing the impacts of pollution through knowledge, education, communication and political intervention.



Areas of work



Fisheries and aquaculture policy in national, regional and European Union level discussions



Marine pollution and renewable energy issues, including marine litter



Campaigns against oil exploration off the Portuguese coast and deep seabed mining



Outreach and awareness raising

Links to Copernicus



Policy: Environmental data interesting to **inform long term policy work** e.g. on climate change effects, together with International Council for the Exploration of the Sea (ICES), also important **for science based campaigning**



Implementation & Control: (near) **real-time data on human activities**, e.g. to monitor Marine Protected Areas (MPAs) & fisheries

Environmental observations are undoubtedly important. But we think we are coming to a time that we really need to **understand human impact and human activities** as these are the ones we **need to control and regulate to minimise our impact on the environment.** – *Seas at Risk*



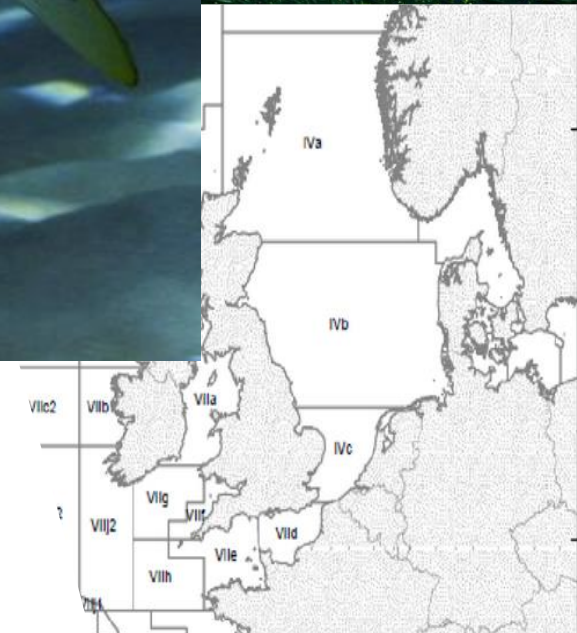
Fisheries and climate change

Hundreds of species are expected to escape the effects of climate change, but this creates challenges for managing fish stocks.

Total Allowable Catch for many species are managed by **Fisheries Policy**

RFMOs negotiate agreements between fishing nations

Example NE Atlantic





Fisheries and climate change

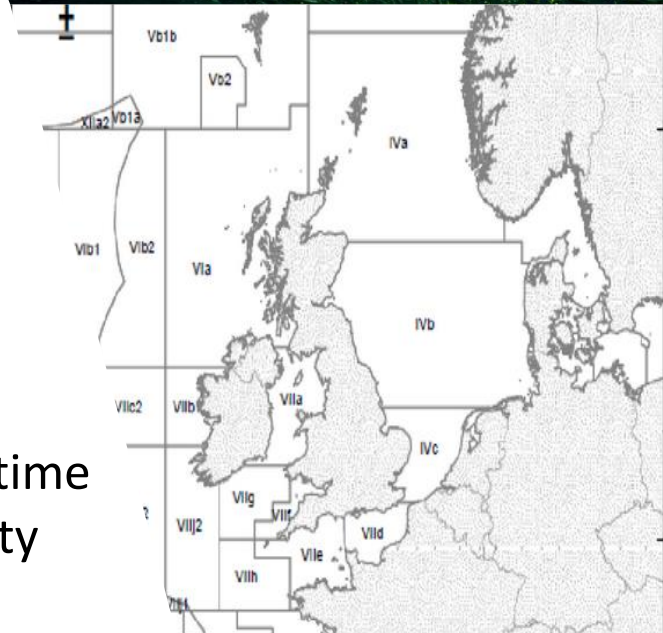
Hundreds of **fish species will be dislocated** to escape the effects of **climate change**. This creates challenges for the management of fish stocks.

Total Allowable Catches (TACS) for many fish species are negotiated in Europe - **Common Fisheries Policy (CFP)**.

RFMOs negotiate quotas internationally between fishing nations.

Example NEAFC : The Mackerel migrated North!!

How can Copernicus contribute: Providing accurate time series of ocean surface water temperature and salinity that can inform on future fishing opportunities





Implementation: Marine Litter

Approx. **13 m tons of plastic** end up in the world's ocean every year:

- 1) **discarded fishing nets** (ghost fishing)
- 2) Economic activities **offshore and harbours**
- 3) **single-use plastic items**



New EU directive on Single-Use Plastics now needs to **be implemented on national levels** and foresees **Extended Producer Responsibility** to cover clean up costs.

How Copernicus can contribute:

Patterns of currents and patterns of storms to predict sources and sinks of marine litter and to facilitate such clean ups.

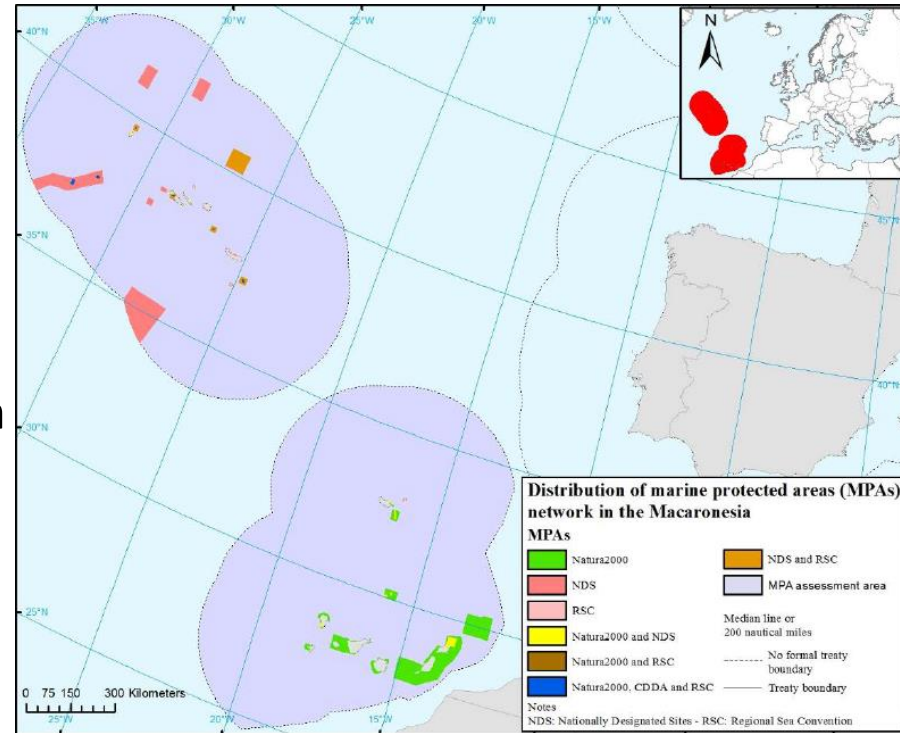


AICHI - MPA monitoring

AICHI Convention on biological diversity:
approx. **10% ocean surface shall** be MPAs

Today most MPAs in Europe are ‘paper’ parks, i.e. **only protected on paper**, not in reality.

Fisheries is one of **the most damaging activities** needs to be better regulated.



MPAs in Portuguese archipelagos

How can Copernicus contribute:

Having data showing the intensity of fishing levels in MPAs would help demonstrate to regulators that laws and enforcement are needed to stop intensive fishing in MPAs



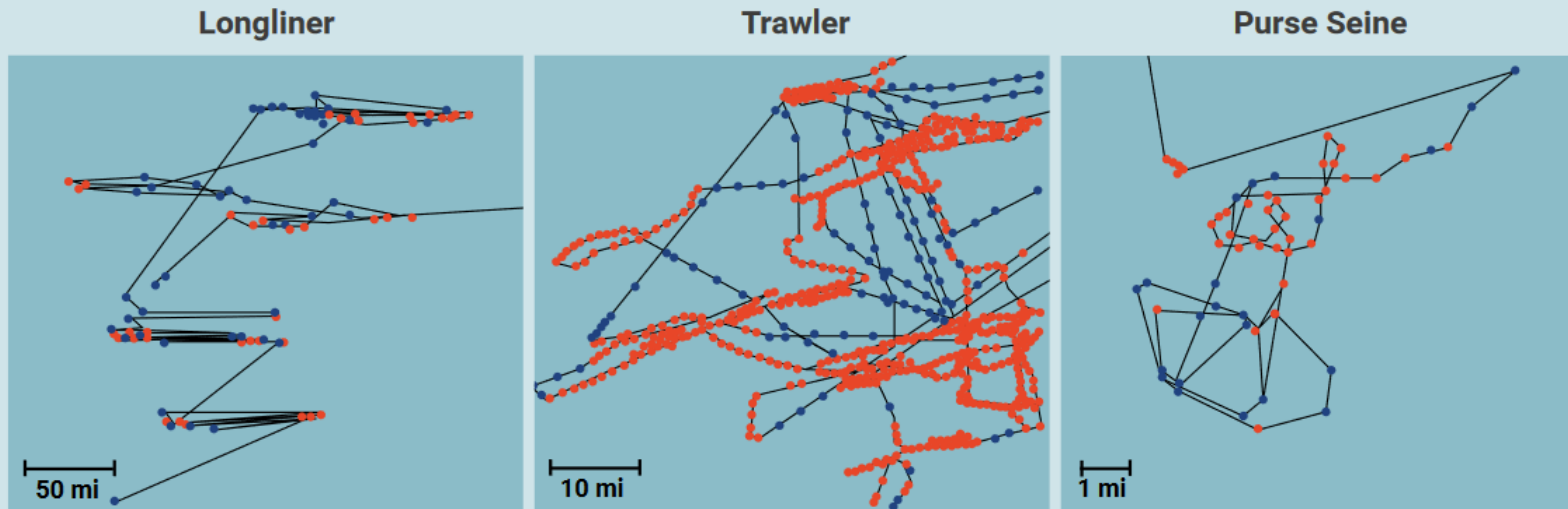
MPAs & IUU Fisheries

Illegal, unreported and unregulated fishing (IUU) depletes fish stocks, destroys marine habitats, distorts competition and weakens coastal communities, values up to \$23.5 billion worth of fish annually



Vessel tracks

Global Fishing Watch can give a clear indication of where, when and how a vessel fishes by analysing its movements.



The orange dots and lines indicate when the vessel is actively fishing and the blue when it is moving between fishing areas.

Way forward

1. To identify other topics a **closer engagement with NGOs** needed
2. Interest what improvements **DIAS** will enable regarding EO data & products
3. Access to environmental data of CMEMS, CAMS and C3S is good for some policy work and **science based campaigning**
4. **Higher resolution data** has more impact on implementation and control
5. The **CMS service** supports monitoring of human activity at sea for a range of functions, including amongst others maritime safety and security, **fisheries control, marine pollution monitoring** and law enforcement
6. **NGOs as partner** of Copernicus, use policy, mobilization & outreach capacity

For more informed policy work, NGOs and the public would like to receive from CMS service anonymous statistical or summary information, detailing where IUU fishing activities or oil pollution occurred !!

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