

## How Data delivers the Science we need for the Ocean we want

A case study on data and information and their role in delivering the QSR 2023

2024 Ocean Decade Conference
Barcelona, 12/04/2024
Ellie Dening



## **Data Rationale**

NEAES 2030 is the means by which OSPAR's 16 Contracting Parties will implement the OSPAR Convention until 2030

JAMP provides the strategic direction to the preparation of assessments of the implementation of the NEAES

CEMP aims to deliver comparable data from across the OSPAR Maritime Area

Coordinated Environmental Monitoring Programme (CEMP)

**OSPAR Convention** North-East Atlantic **Environment Strategy** 2030 (NEAES 2030) Joint Assessment and Monitoring Programme (JAMP)



## For example...

# Marine Litter Beach Monitoring

- NEAES 2030: Strategic objective 4: Prevent inputs of and significantly reduce marine litter, including microplastics, in the marine environment to reach levels that do not cause adverse effects to the marine and coastal environment with the ultimate aim of eliminating inputs of litter.
- JAMP: Product B-1: Assessment of the quantities, types, sources and trends of marine litter, including the impact of litter on the marine environment
- CEMP: CEMP Guidelines for marine monitoring and assessment of beach litter (OSPAR Agreement 2020-02)



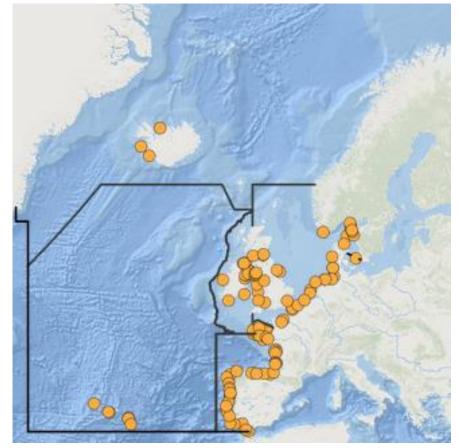


# Marine Litter Beach Monitoring – Data Reporting

Surveys four times a year on nominated beaches

 use of standardised methodology and reporting templates on the reference beaches

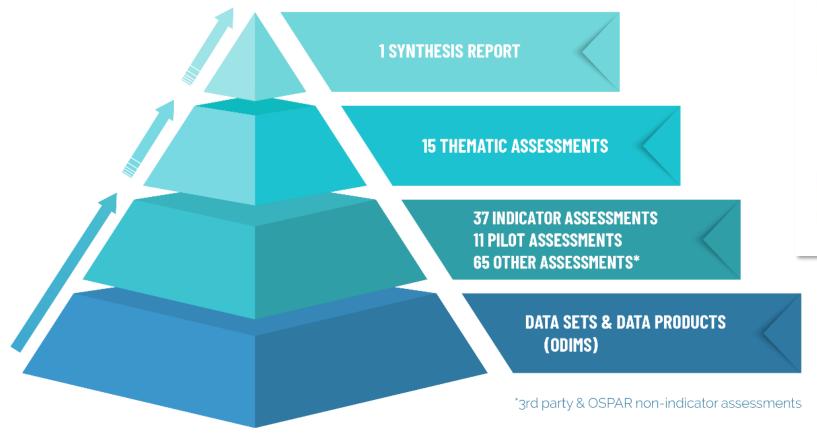
quarterly submission of data



https://odims.ospar.org/en/submissions/ospar beach litt er survey sites 2022 06 001/



# The key role OSPAR data plays





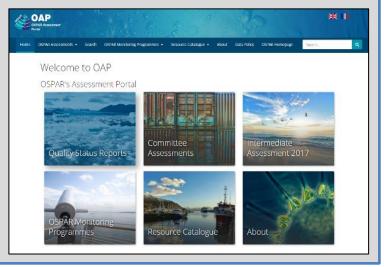
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OSPAR Data and Information Management System (ODIMS) and OSPAR Assessment Portal (OAP)



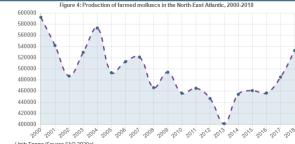


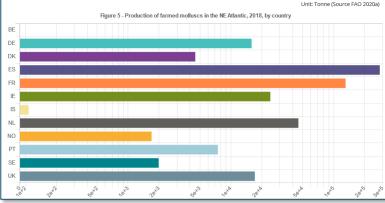




#### Shellfish aquaculture

- 2.7 The largest producers of shellfish in OSPAR Regions were Spain in the Bay of Biscay and Iberian Coast (mainly mussels) and France in the Greater North Sea, the Celtic Seas, and the Bay of Biscay and Iberian Coast (predominantly oysters). Spain (sixth) and France (eighth) were among the largest global producers of marine and coastal molluscs (FAO, 2020b)2
- 2.8 Shellfish cultivation also occurs elsewhere in Arctic Waters, the Greater North Sea and the Celtic Seas. Cultivation techniques vary: for example, mussel production in Spain is largely 'offbottom', using ropes fixed to floating rafts (STECF, 2018). In the Netherlands and Germany, blue mussel seeds are collected with similar techniques using ropes fixed to poles or anchors. For maturing of the seeds, mainly 'on-bottom' techniques are used, using natural designated beds. These may have different environmental impacts - for example, during maintenance and extraction of species (for more detail see OSPAR, 2009 and European Commission, 2012).





2.9 The STECF analysis noted the impact of factors such as shellfish mortalities, weather conditions and diseases. The EU's 2020 Blue Economy report referred to impacts of disease and lack of seed on mussels and other shellfish in 2013, although production had recovered subsequently (European Commission, 2020). For 2019, FAO reported that Spanish mussel production was likely to reach a new high; conversely, the hot summer in France had an impact on oyster mortality, with lower production expected in 2020 (FAO, 2019). Since 2008, significant mortality of juvenile oysters in France has been experienced, with the OsHV1 µvar virus being an important factor (STECF, 2018).

## EMODnet Human Activities Vessel Density Mapping - Service, 2019

2021-01-06

**Datastream:** EMODnet Human Activities

Dataset: Vessel Density Committee: Cross cutting

Organisation: OSPAR Commission

Data Theme: Cross cutting



## OSPAR Dumping and Placement of Wastes or Other Matter at Sea

2021

2021-01-01

Datastream: Dumping and Placement of Wastes or Other Matter at Sea Dataset: Dumping and Placement of Wastes or Other Matter at Sea

Committee: EIHA

Organisation: OSPAR Commission

Data Theme: Environmental Impacts of Human Activity



### OSPAR Fishing for Litter - 2021

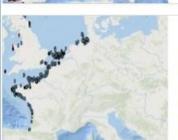
2021-01-01

Datastream: Fishing for Litter Dataset: Fishing for Litter

Committee: EIHA

Organisation: OSPAR Commission

Data Theme: Environmental Impacts of Human Activity



#### OSPAR Munition Encounters - 2021

2021-01-01

Datastream: Encounters with Dumped Chemical and Conventional Munitions

**Dataset: Munition Encounters** 

Committee: EIHA

Organisation: OSPAR Commission

Data Theme: Environmental Impacts of Human Activity

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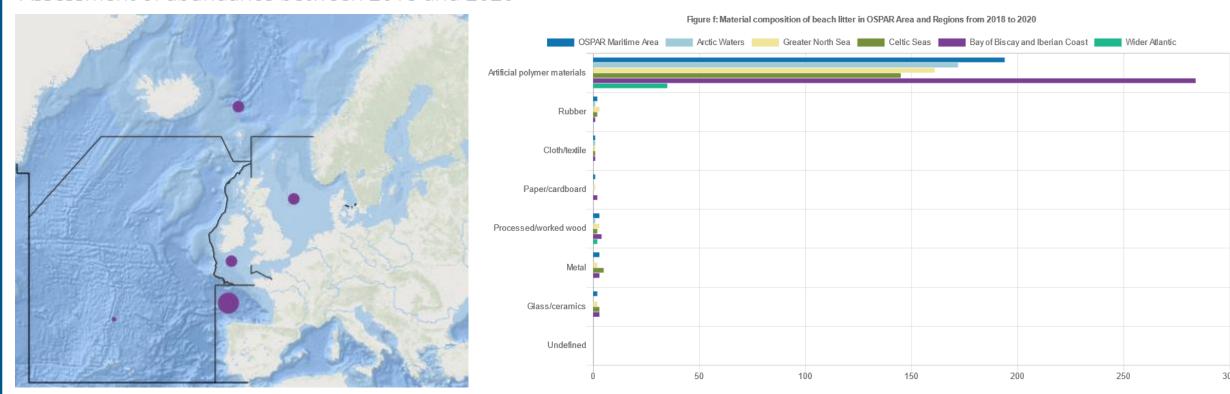




# Case Study: Marine Litter Beach Monitoring

## Assessment of reported data:

Assessment of abundance between 2018 and 2020



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## Closing messages

- Coordinated data collection through agreed, robust regional monitoring programmes, is proven to be a
  powerful tool in responding to high-level objectives.
- Regional level assessments would not be possible without a coordinated approach and strong collaboration
- Working at a regional level provides an efficient and cost-effective means of delivering ecologically relevant assessment results that allow a coherent response to shared concerns
- Online data and assessment portals allow viewing and downloading of all this data and information, and reuse of content by all, to further respond to onward requirements