



**OSPAR**  
**COMMISSION**

*Protecting and conserving  
the North-East Atlantic  
and its resources*

# OSPAR and CEP Cooperation

A decorative horizontal bar consisting of a series of colored rectangular segments in red, yellow, green, red, orange, light blue, yellow, maroon, orange, pink, yellow, olive green, and dark blue. To the right of this bar, there is a smaller section with three segments: green, dark blue, and dark blue.

**CONSERVE AND SUSTAINABLY USE THE  
OCEANS, SEAS AND MARINE RESOURCES  
FOR SUSTAINABLE DEVELOPMENT**

**14** LIFE  
BELOW WATER

The icon for Sustainable Development Goal 14, 'Life Below Water', which consists of three wavy lines representing water and a stylized fish swimming to the right.

John Mouat, Deputy Secretary, OSPAR Commission

# OSPAR Commission

## 16 Contracting Parties

- Belgium
- Denmark
- Finland
- France
- Germany
- Iceland
- Ireland
- Luxembourg
- The Netherlands
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- The United Kingdom
- European Union



## OSPAR Maritime Area and Regions:

Region I: Arctic Waters

Region II: Greater North Sea

Region III: Celtic Seas

Region IV: Bay of Biscay/Iberian Coast

Region V: Wider Atlantic

# The North-East Atlantic Environment Strategy

**Part I:** Implementing the Ecosystem Approach

**Part II:** Thematic Strategies

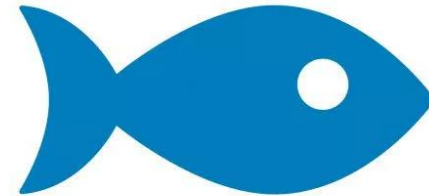
- Biological Diversity and Ecosystems
- Eutrophication
- Hazardous Substances
- Offshore Oil and Gas Industry
- Radioactive Substances



# Ocean Conference 2017 Commitment

- Voluntary commitment to collaborate across the Atlantic as a contribution to fulfilling SDG14  
**#OceanAction17198**
- Focus on common strategic issues and problems

**14** LIFE  
BELOW WATER



# Cooperation Project 2018

- Financial support from the Netherlands and Sweden
- Focus on Marine Litter and Marine Protected Areas
- Joint Collaboration with OSPAR, CEP and the Gulf and Caribbean Fisheries Institute



Sida

SWEDISH INTERNATIONAL DEVELOPMENT  
COOPERATION AGENCY



Rijkswaterstaat  
*Ministry of Infrastructure and the  
Environment*

# 2018 Cooperation on Marine Litter

- Expert workshop on harmonised marine litter monitoring
- Support for the initial development of a marine litter database
- Support for on the ground projects:
  - Compilation of best practice in CEP and OSPAR
  - Microplastics in fish

North East Atlantic Environment Strategy:  
Substantially reduce marine litter in the OSPAR  
maritime area to levels where properties and  
quantities of marine litter do not cause harm to the  
coastal and marine environment



# OSPAR Common Indicators

- Beach Litter
- Plastic particles in Fulmars stomachs



- Seabed litter



In development:

- Microplastics
- Plastic particles in turtles stomachs





## Marine Litter



Beach Litter -  
Abundance,  
Composition and  
Trends



Composition and  
Spatial Distribution of  
Litter on the Seafloor



Plastic Particles in  
Fulmar Stomachs in the  
North Sea

# Beach Litter Indicator

- Number of litter items /100m of coastline
- 50+ sites in 11 countries along NE Atlantic coastline
- Four surveys per year
- Many surveys undertaken by NGOs



# Voluntary pilot project to harmonized monitoring



	2007	2017
No. Countries	4	12
No. Surveys	93	346
No. Beaches	32	109



# Beach Litter Monitoring Guidelines

OSPAR ID	Unep ID	Items	Total
<i>Plastic • Polystyrene</i>			
1		4/6-pack yokes	
2		Bags (e.g. shopping)	
3		Small plastic bags, e.g., freezer bags	
112		Plastic bag ends	
4		Drinks (bottles, containers and drums)	
5		Cleaner (bottles, containers and drums)	
6		Food containers incl. fast food containers	
7		Cosmetics (bottles & containers e.g. sun lotion, shampoo, shower gel, deodorant)	
8		Engine oil containers and drums <50 cm	
9		Engine oil containers and drums > 50 cm	

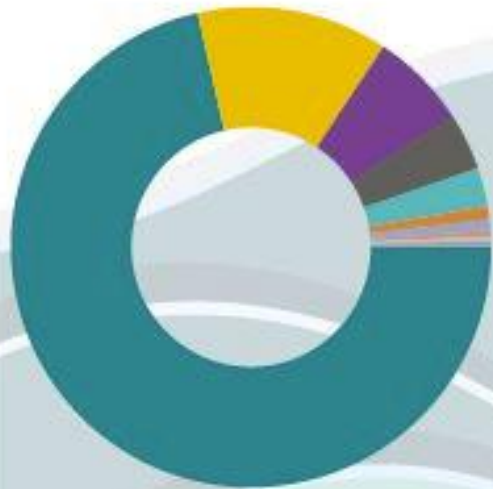


## Beach litter monitoring sites

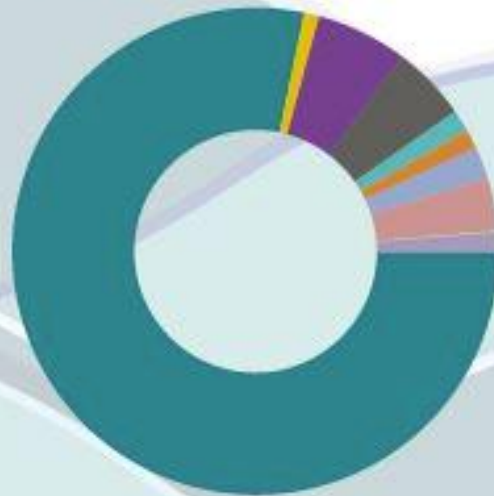
# Marine litter composition by material

- plastic/polystyrene
- paper/cardboard
- sanitary
- metal
- wood
- glass
- cloth/textile
- rubber
- medical waste
- ceramic/pottery

## Bay of Biscay and Iberian Coast



## Celtic Seas



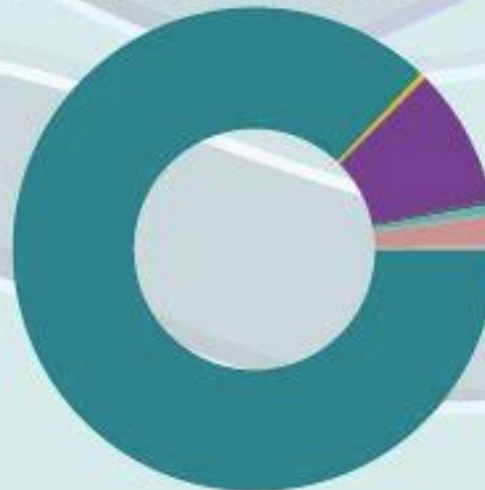
## Southern North Sea

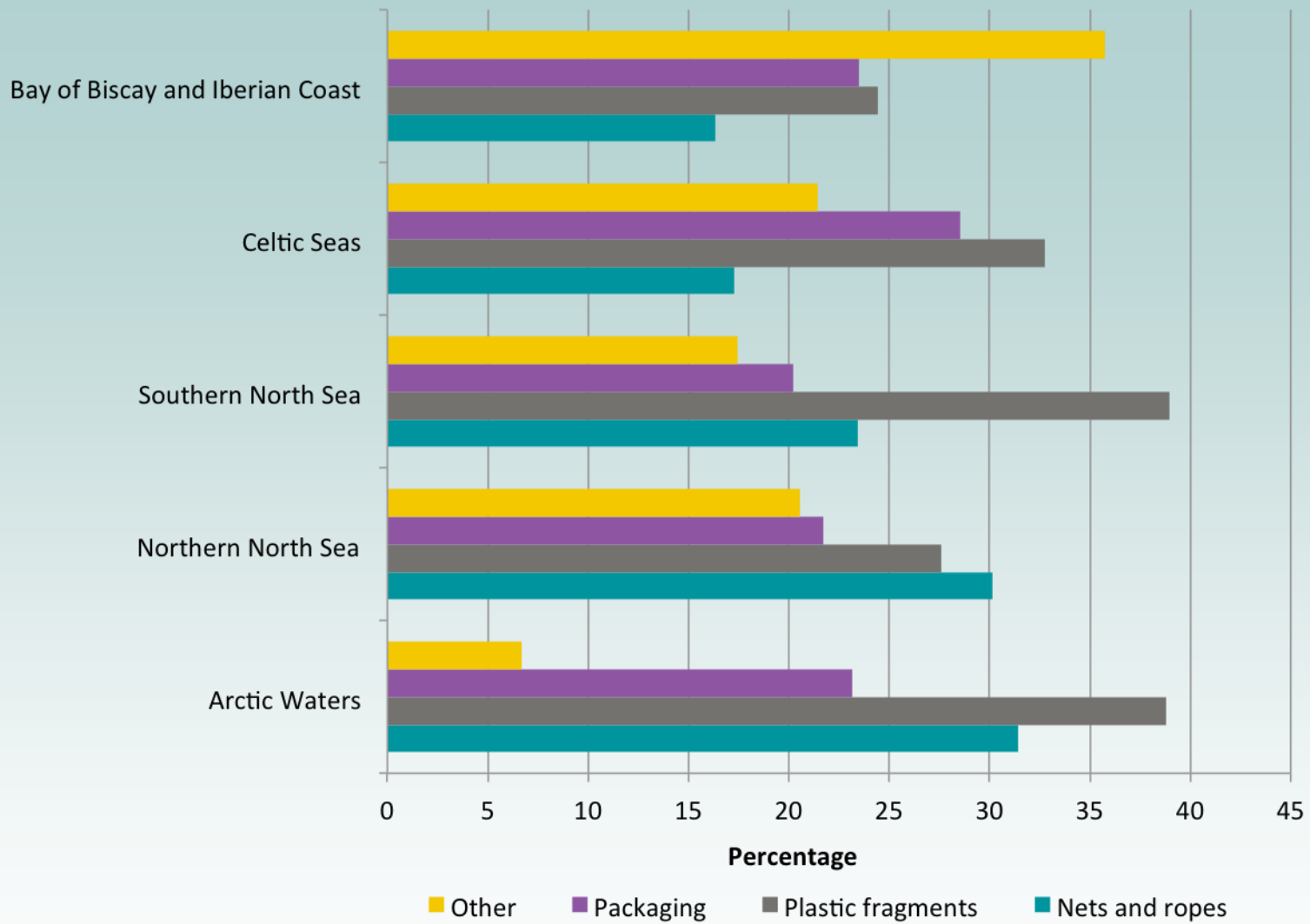


## Arctic Waters

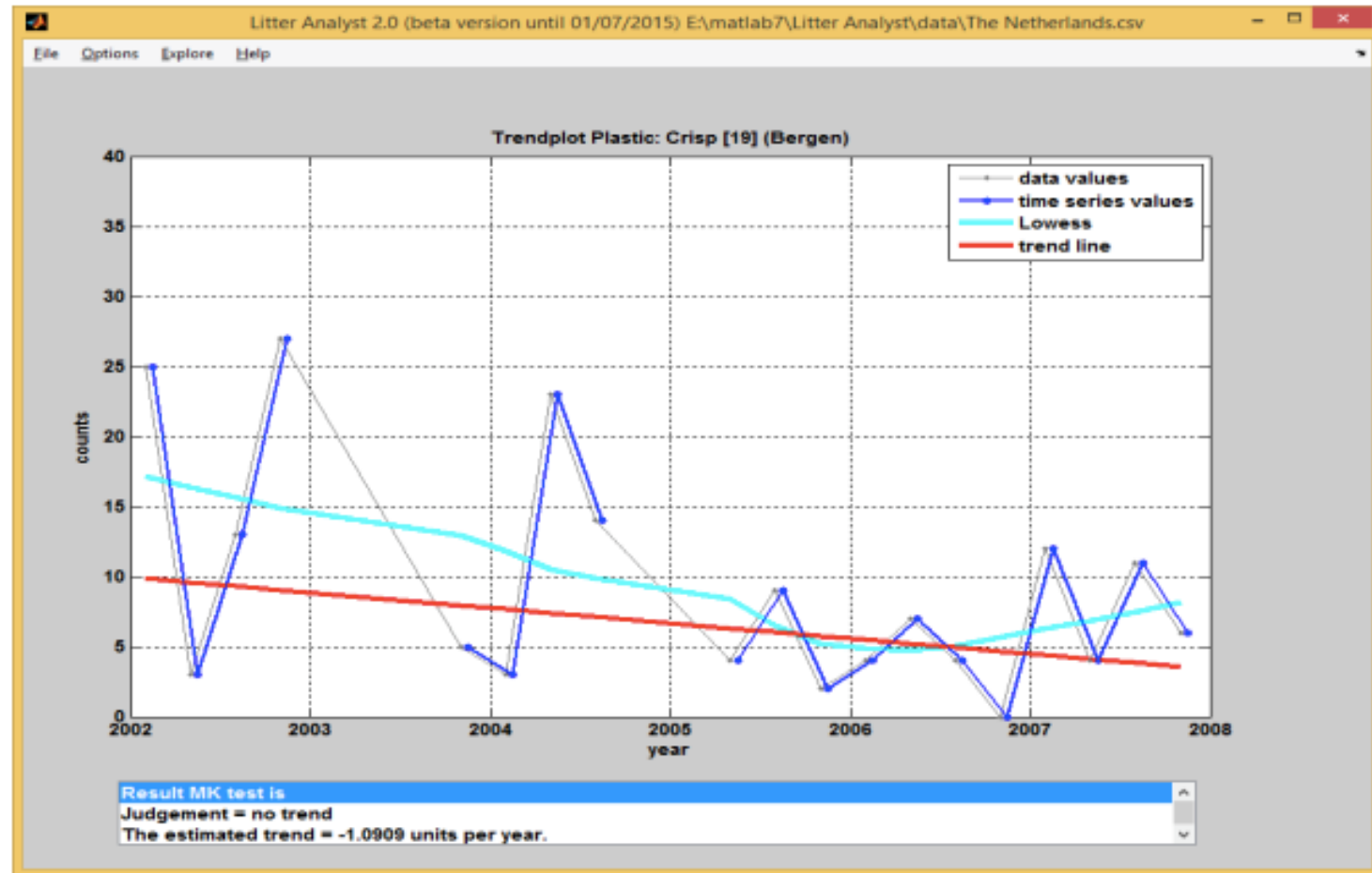


## Northern North Sea





# Litter Analyst





# Trends in items can be linked to measures

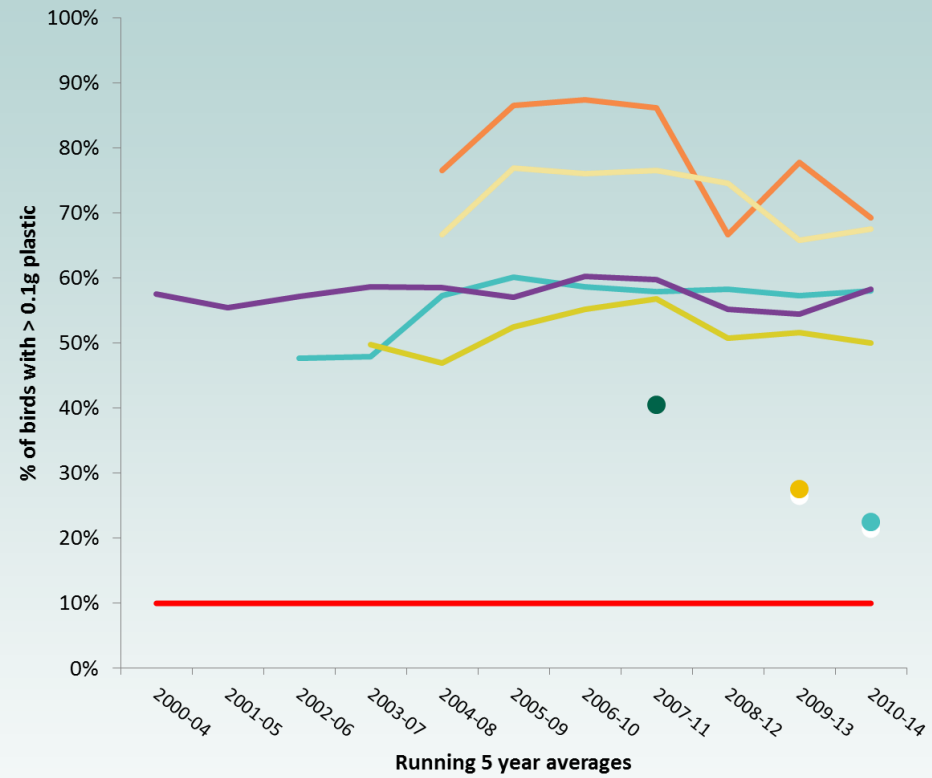
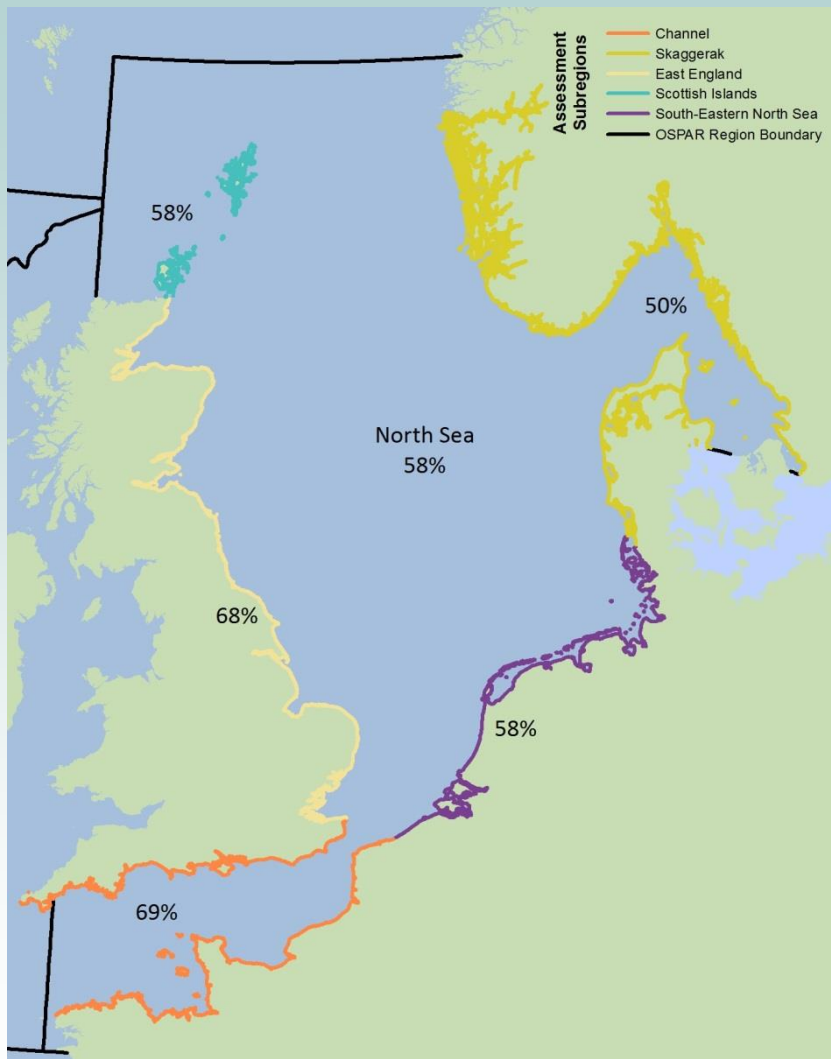
Item name [OSPAR ID number]	Median number of items/100m of coast	Average number of items/100m of coast	St. dev.	CV	% of total number of litter items recorded	Trend [number/year]	p-value	Relative trend % increase or decrease per year
San: Cotton bud sticks [98] H	64.3	151.8	199.4	131.40%	20.90%	-17.8	0.034	-11.7
Nets and ropes [300] H	86	141.5	127	89.80%	19.50%	-11.3	0.112	-8.0
Plastic: Caps and lids [15] H	38.6	134.1	178.9	133.40%	18.50%	-8.6	0.081	-6.4
Plastic/polystyrene pieces < 50cm [301] H	16	81.6	162.6	199.30%	11.20%	5	0.011	6.1
Paper: Cigarette butts [64]	25.4	43.2	51	118.20%	5.90%	-2.2	0.289	-5.1
Wood: Other items < 50cm [74] F	2.3	22.8	83.3	365.30%	3.10%	-0.5	0.129	-2.2
Plastic: Other items [48]	11.5	21.5	27.7	128.60%	3.00%	-0.6	0.82	-2.8
Plastic: Crisp/sweet packets and lolly sticks [19] H	10.1	15.1	14.6	96.60%	2.10%	-1.8	0.049	-11.9
Plastic: Oyster nets or mussel bags incl. plastic stoppers [28] H	6	11.3	12.9	114.40%	1.60%	0.2	0.94	1.8
Plastic: Drinks bottles and containers [4]	5.9	8.4	6.5	76.70%	1.20%	-1.6	0.045	-18.8
Plastic: Tangled nets/cord/rope and string [33] H	2.5	7.6	10.2	133.40%	1.10%	-0.4	0.12	-5.3
Plastic: Strapping bands [39]	4.3	6.9	6.5	94.90%	0.90%	-0.9	0.102	-13.3
Plastic: Lobster pots [26] H	2.5	5.7	8	141.10%	0.80%	-1	0.017	-17.6
Plastic: Cutlery/trays/straws [22]	4.4	5.5	6.2	113.10%	0.80%	0	0.97	0.6
Metal: Industrial scrap [83]	0	5	21	422.20%	0.70%	0	0.011	0.0

# Plastic particles in fulmars stomachs

- 10% of northern Fulmars having more than 0.1 g plastic particles in the stomach
- Based on beached bird survey
- Greater North Sea only



# Plastic in fulmars stomachs



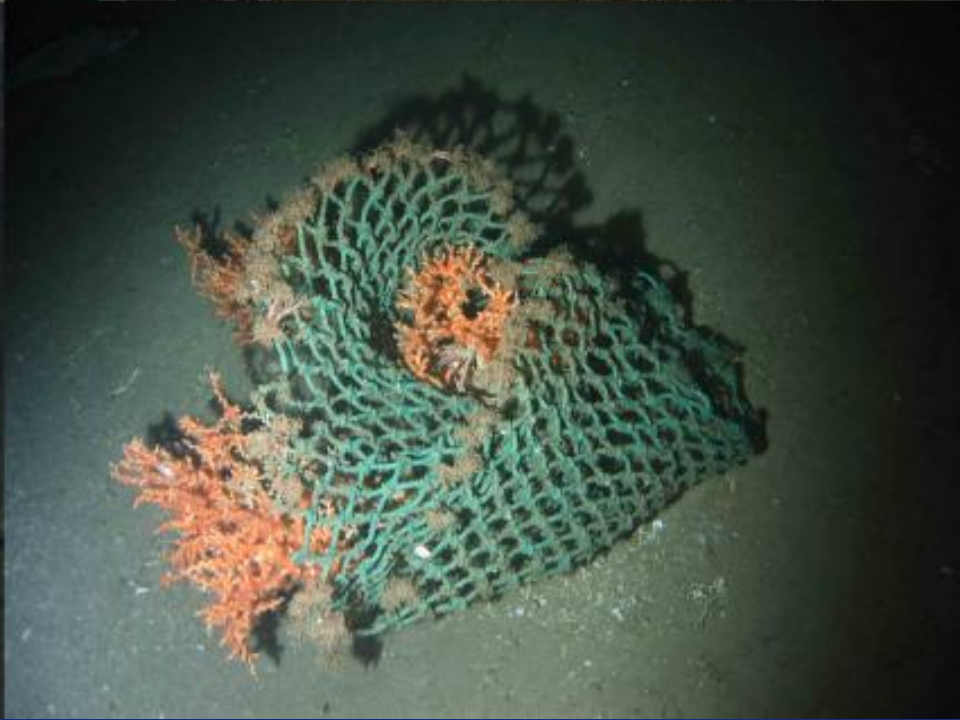
- Channel
- E-England
- Scottish Islands
- SE-NorthSea
- Skagerrak
- Faroe Islands (2007-11)
- Iceland (2011)
- Svalbard (2013)
- Long term Target

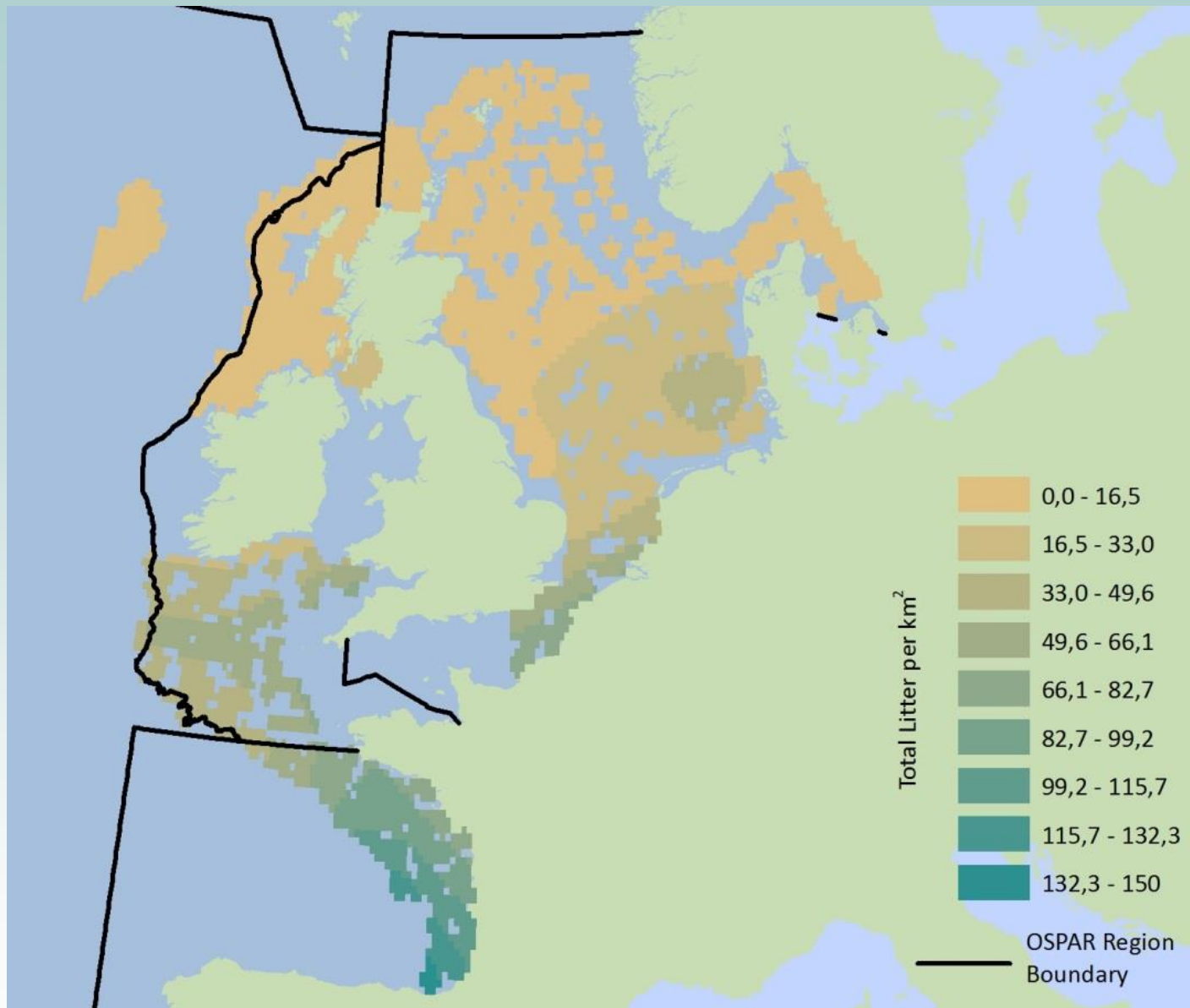
# Plastic Particles in Turtles



# Seabed Litter

- Macro litter items per km<sup>2</sup> of seabed
- Based on International Bottom Trawl Surveys





## Spatial Distribution of Litter on the Seafloor

# Policy Actions on Marine Litter

“develop appropriate programmes and measures to reduce amounts of litter in the marine environment and to stop litter entering the marine environment, both from sea-based and land-based sources”

OSPAR Regional Action Plan  
on Marine Litter Adopted 2014





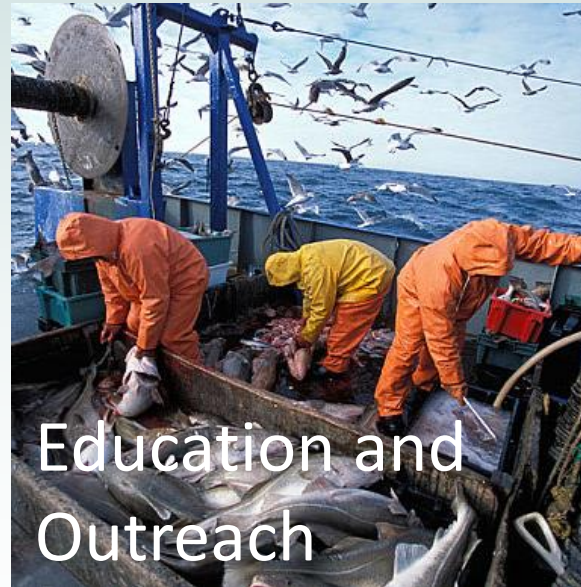
Sea-based sources



Land-based sources



Removal actions



Education and Outreach

# RAP Structure



# Key Action Areas

- Port Reception Facilities
- Waste from Fishing industry
- Fines for littering at sea
- Fishing for Litter
- Abandoned and lost Fishing gear
- Floating Litter hotspots
- Education and outreach
- Improved waste management
- Sewage/stormwater run-off
- Reduction of single use items
- Removal of micro plastics from products/zero pellet loss
- Redesign of harmful products

# Actions Under Development



- Reduction of emissions of pre-production plastic Pellets
- Strategic approach to reduction of single use items
- Environmental Education for Fishermen
- Reduction of waste and ADLFG from fishing industry

# Coordination with European RSCs and EU



United Nations  
Environment Programme



Mediterranean Action Plan  
Barcelona Convention



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# Marine Litter Projects



- Propose and test plausible alternatives for EPS products
- Engage producer and designer communities
- Assess policy options



- Map good practices
- Improved marine litter monitoring
- Modeling of floating hotspots
- Tackling marine with stakeholders (e.g. fisheries)

# Recommendations for Harmonised Monitoring

- Start small and build up
- Engage NGO's and industry
- Chose sites that can be monitored long term
- Use existing tools
- Ensure your litter items are linked to measures



