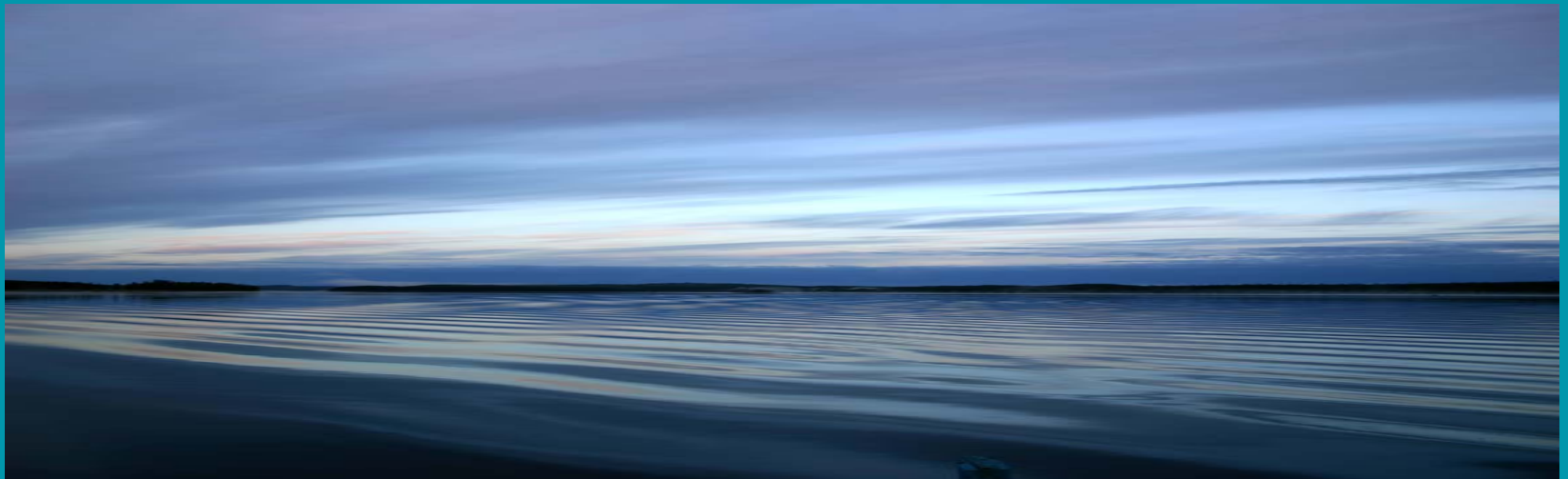




OSPAR
COMMISSION

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

Development of fact sheets on emerging issues



David Johnson, Executive Secretary OSPAR
10th Global Meeting RSC and AP, Guayaquil, Ecuador 25-27.11.2008



Presentation structure

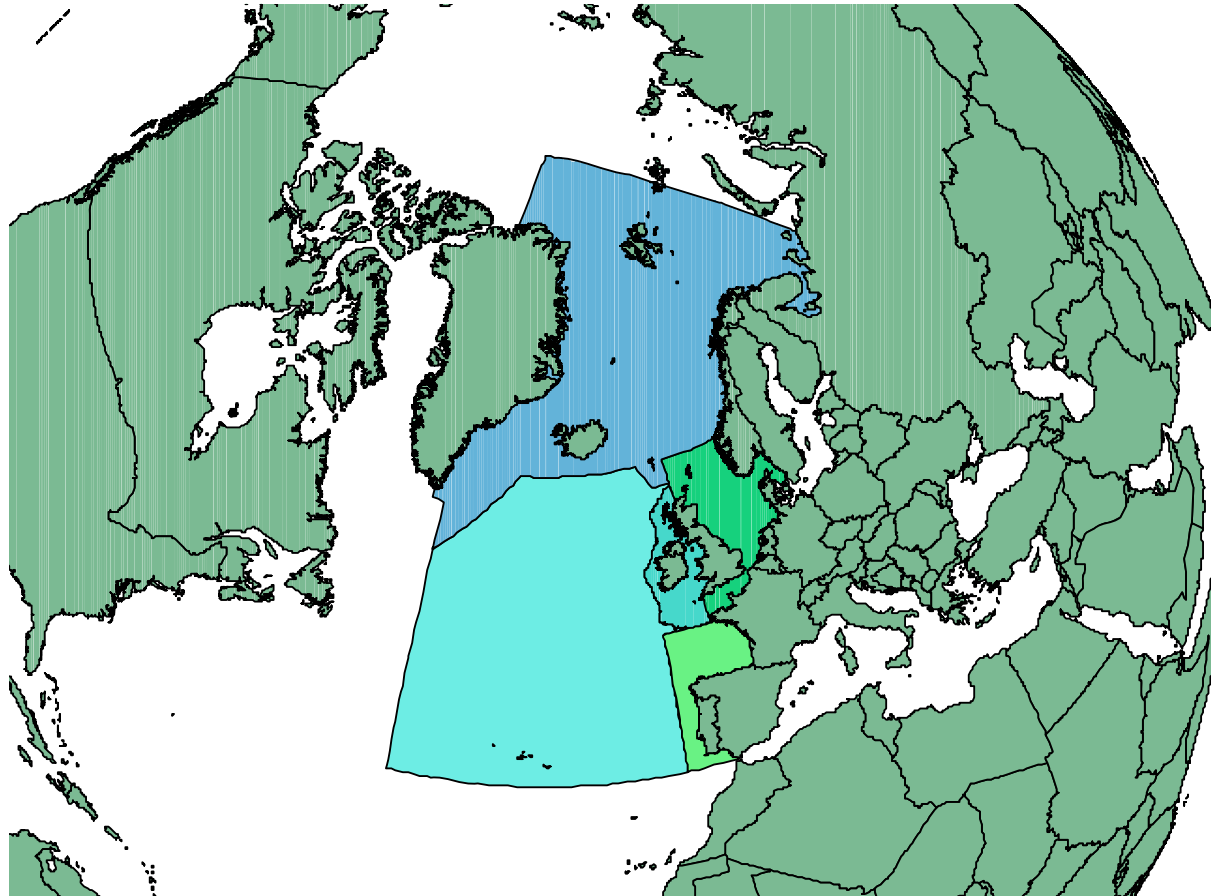
- OSPAR
- Achievements
- Emerging issues
 - Litter / micro plastics
 - MSP / human activities / munitions
 - Fisheries / co-operation / EA
 - Marine science / ABNJ
 - Ocean chemistry
 - OSPAR list
 - Monitoring
- Concluding remarks

OSPAR's vision is of a clean, healthy,
biologically diverse North-East Atlantic
ecosystem



OSPAR Convention

35-year track record



- 5 Annexes
- 15 states + EC
- NGOs / observers
- 1994 : 5 regions
- 1998 : 6 Strategies

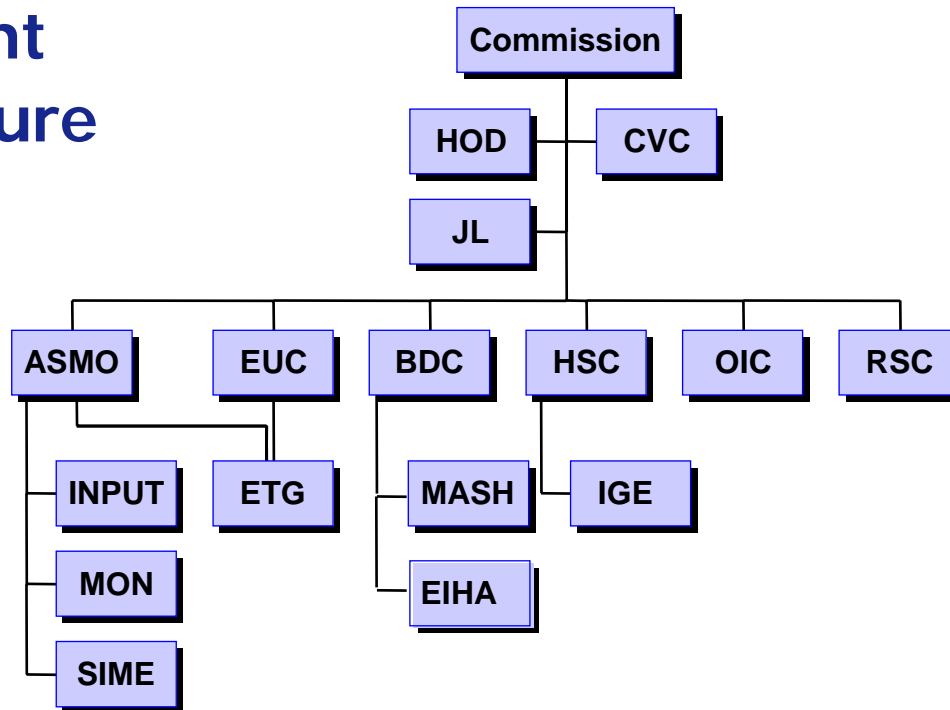
- Hazardous substances
- Eutrophication
- Radioactivity
- Offshore industries
- Biodiversity
- Assessment & monitoring

How we work in practice ...

- Annual meeting schedule of Contracting parties and observers facilitated by a Secretariat
- Importance of lead country approach, intersessional work, national workshops
- OSPAR Rules of Procedure
- Programme and measures adopted in the form of Decisions, Recommendations, other Agreements
- Data, information and products (guidance, publications, databases (e.g. wind farm sites))
- Flagship outputs: JAMP and QSR

Scientifically, collectively, by consensus, slowly ...

Current structure



management

strategy committees

working groups

- 60-70 meeting days / year
- Detailed work programmes reviewed /updated annually
- Small administrative budget with leverage on Contracting Party environmental resources

Strengths

- Sea does not respect national boundaries – OSPAR enables states to agree action and cooperate in setting objectives
- Long-term holistic approach needed – OSPAR has developed a comprehensive set of strategies to 2020
- Good science, careful monitoring and accurate assessment must underpin policy – OSPAR JAMP
- An ecosystem approach is needed to ensure holistic solutions – OSPAR EcoQOs support this
- Measures need to be implemented and the implementation needs to be checked – every OSPAR measure has its implementation reporting and assessment procedures

Achievements

Hazardous substances	Input of heavy metals reduced by 50-75% Concentrations of heavy metals in sea reducing
Eutrophication	Major problem in late 1980s, phosphorus inputs now down by 50%, nitrogen inputs down 12%
Radioactive discharges	National plans for reductions, discharges from nuclear plants radically reduced 1989-2004
Offshore oil and gas installations	All aspects now regulated, environmental goals for reducing oil in produced water + chemical use
Marine biodiversity conservation	Ecological quality objectives for a healthy North Sea, list of threatened/declining species and habitats, MPA and marine spatial planning initiatives Evaluating the impact of non-polluting human activities
Monitoring and assessment	Comprehensive monitoring of substances, reporting, Joint Assessment and Monitoring Programme

Emerging issues

Factsheet	Deadline	Action by
1. Litter (with a focus on OSPAR's litter products – Pilot, Agreement, Fishing 4 Litter, significance study)	End Oct. to printer End Nov. ready	UNEP 1 st page. OSPAR: rest
2. Munitions (with a focus on the EIHA Assessment) as an example of the need for Marine Spatial Planning	End Oct. to printer End Nov. ready [currently on hold]	OSPAR HELCOM
3. Fisheries (with a focus on the NEAFC MoU) within the context of the Ecosystem Based Approach	Mid Jan. to printer Mid Feb ready	OSPAR / NEAFC
4. Deep sea marine science (with a focus on the code) and Areas Beyond National Jurisdiction	Mid Jan. to printer Mid Feb ready	UNEP-WCMC OSPAR
5. Ocean chemistry / acidification (with a focus on CCS) and climate change	Mid Jan. to printer Mid Feb ready	OSPAR
6. Selection of threatened species and habitats in need of protection including possible measures	March	OSPAR CBD
7. Monitoring (with a focus on the QSR 2010)	March	OSPAR

Marine litter

Pilot project

Beach monitoring

Fishing for litter

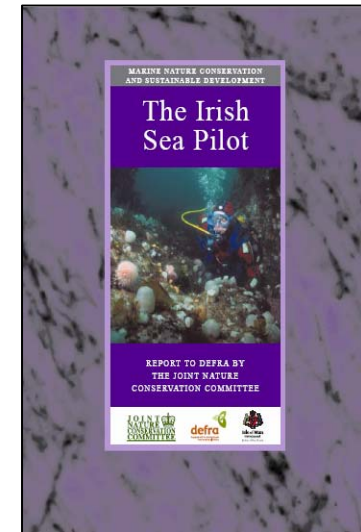
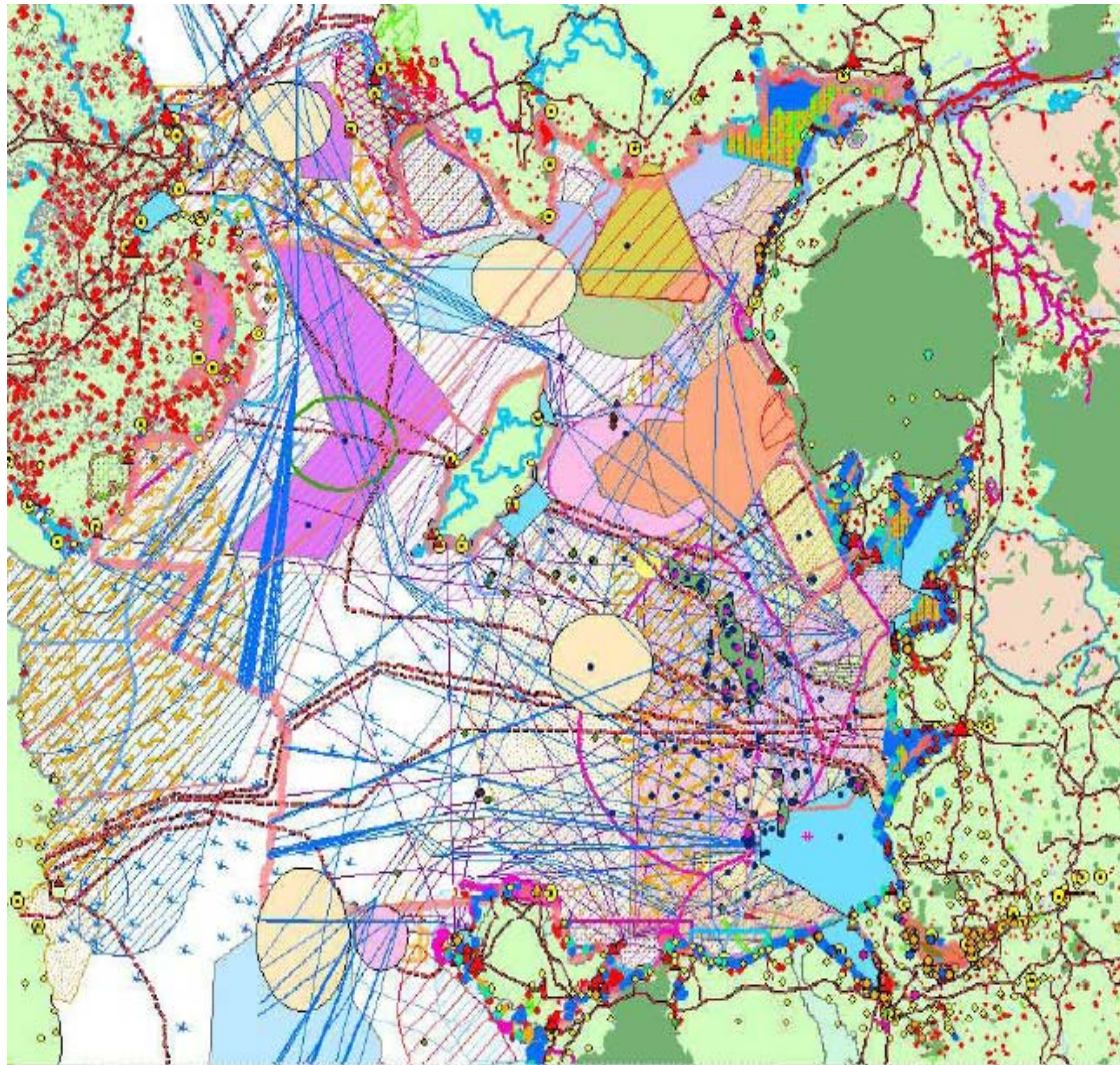
Micro plastics





- **55 beaches in 9 countries**
51 reference beaches + 4 additional
- **624 surveys on 100-metre stretches**
614 on reference beaches + 10 additional
- **335 surveys on 1-km stretches**
On 31 reference beaches in 6 countries

Marine Spatial Planning and Management



Addressing the protection of biodiversity from human activities



Lärm und Meeressäuger

Traditionelle Munitionsbeseitigung durch Sprengung



S. Nehring

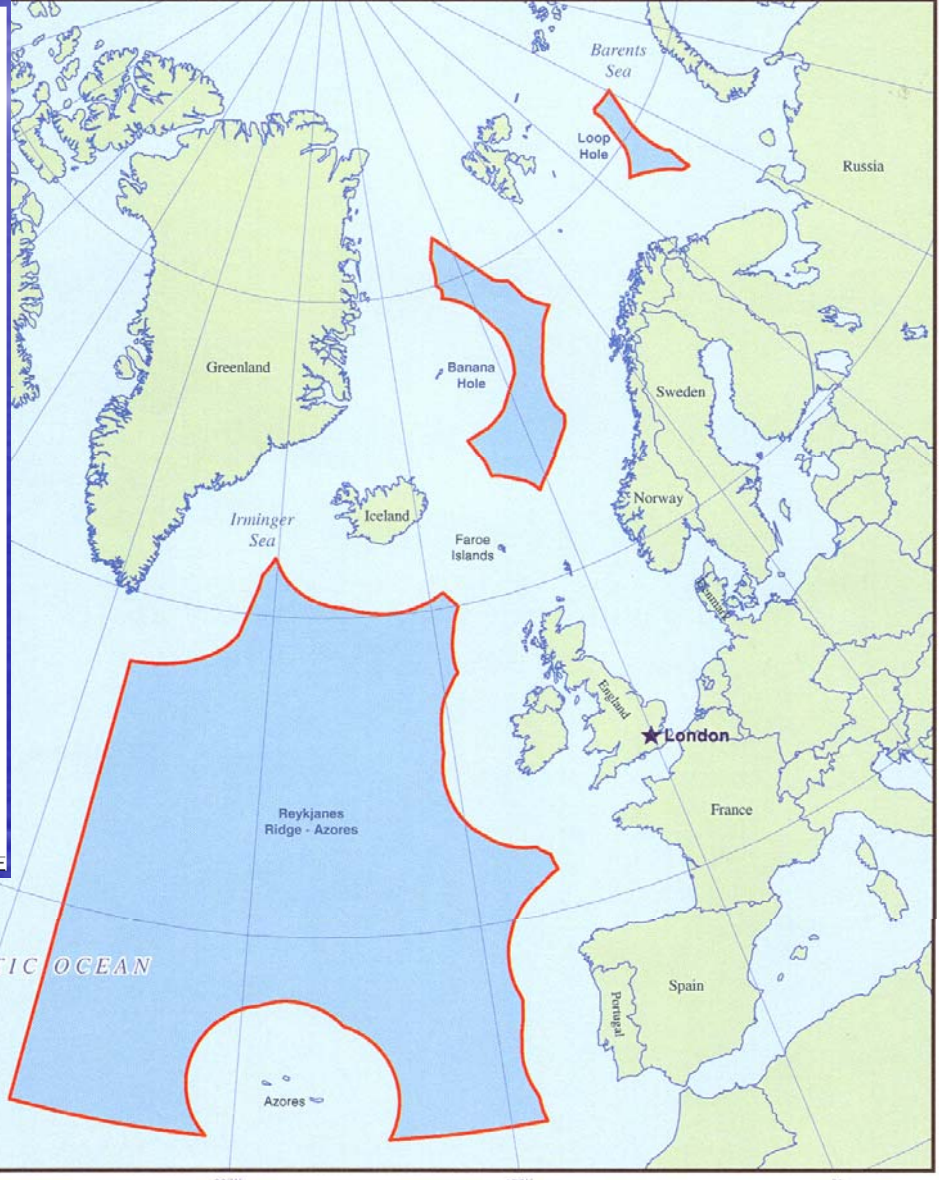
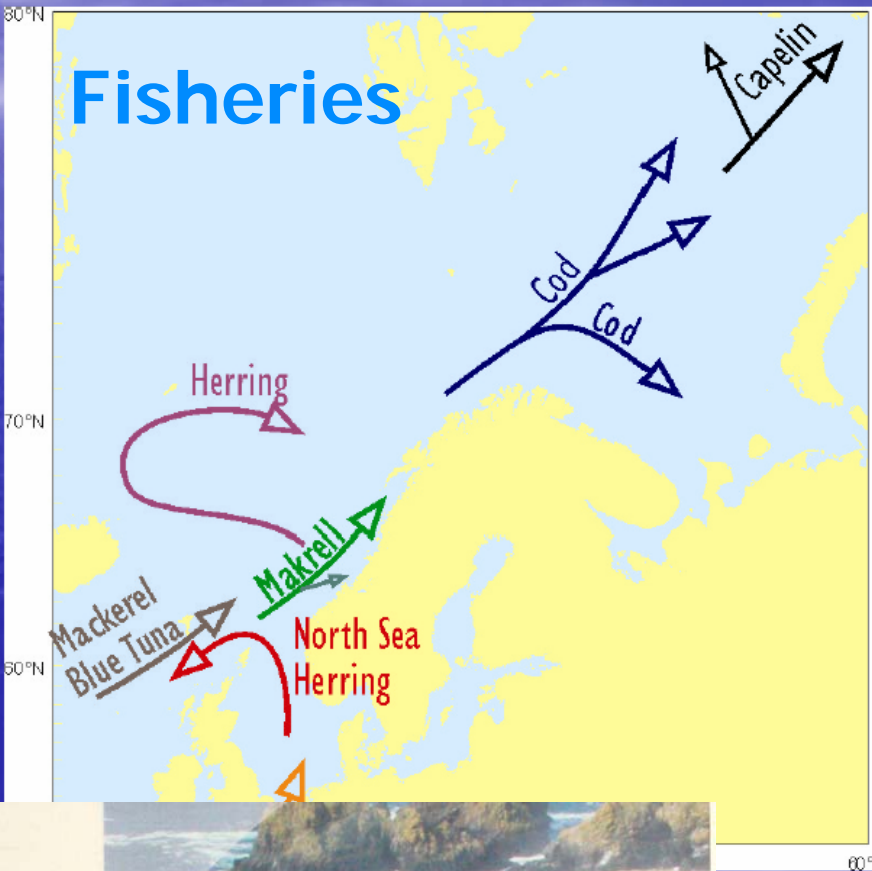


Unterwassersprengungen –
Lübeck 15. März und 2. Oktober 2007
Kiel 1. und 2. Oktober 2006 (33 Sprengungen)
(S. Nehring, Graner)



Symposium Munitionssprengung
19. Okt. 2007, Kiel

Fisheries



for illustration purposes only
 Map Projection: Lambert Conformal Conic
 Standard Parallels: 49°N, 77°N
 Central Meridian: 25°W

Global Overview of Straddling and Highly Migratory Fish Stocks. Evelyne Meltzer: working copy 04/2005

— RFMO Boundary

North East Atlantic Fisheries Commission (NEAFC)

★ Headquarters: London, England

OSPAR MPAs
(red)

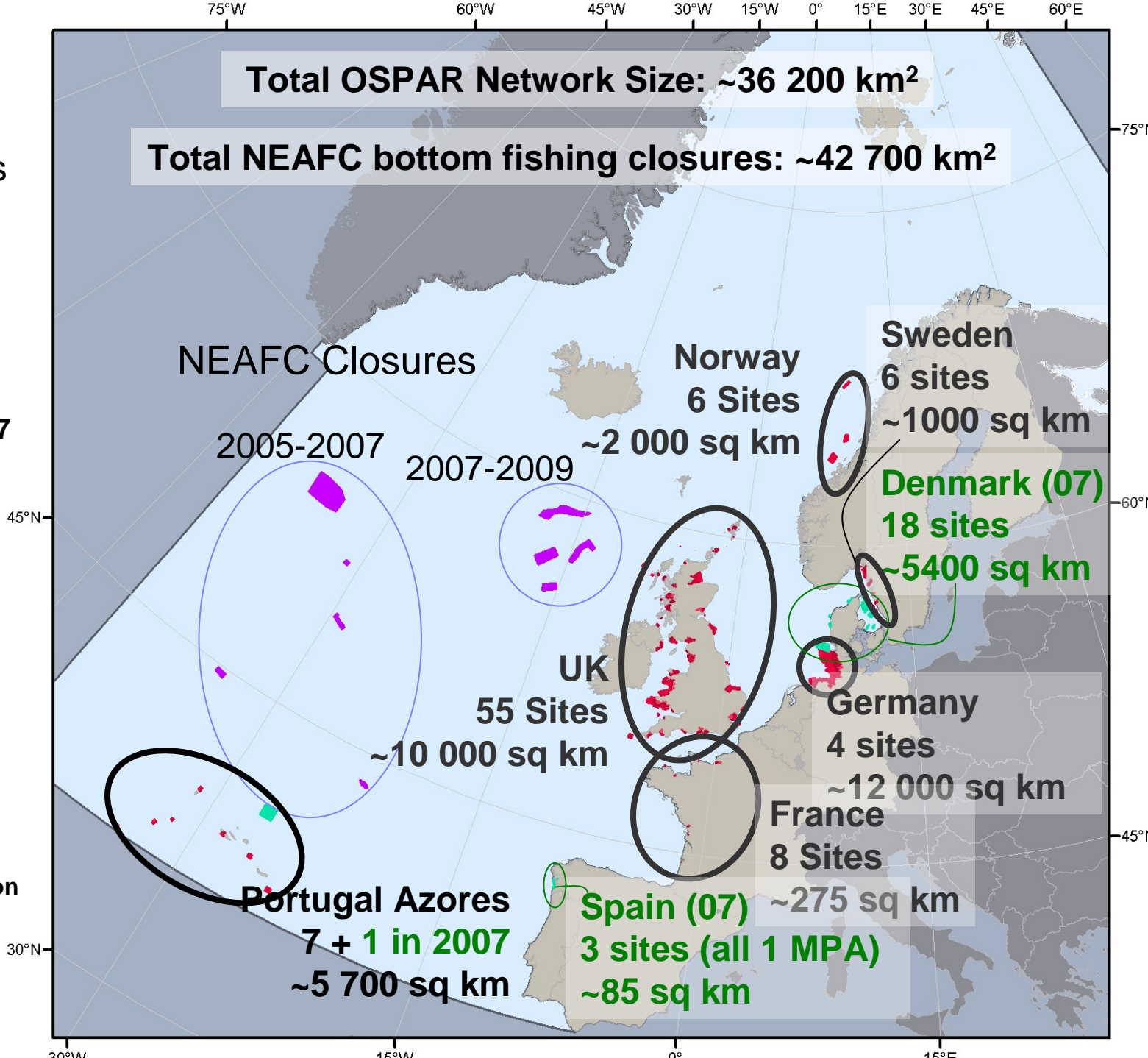
OSPAR MPA
Nominations 2007
(green)

NEAFC
Closures
(purple)

Just shown as
additional information

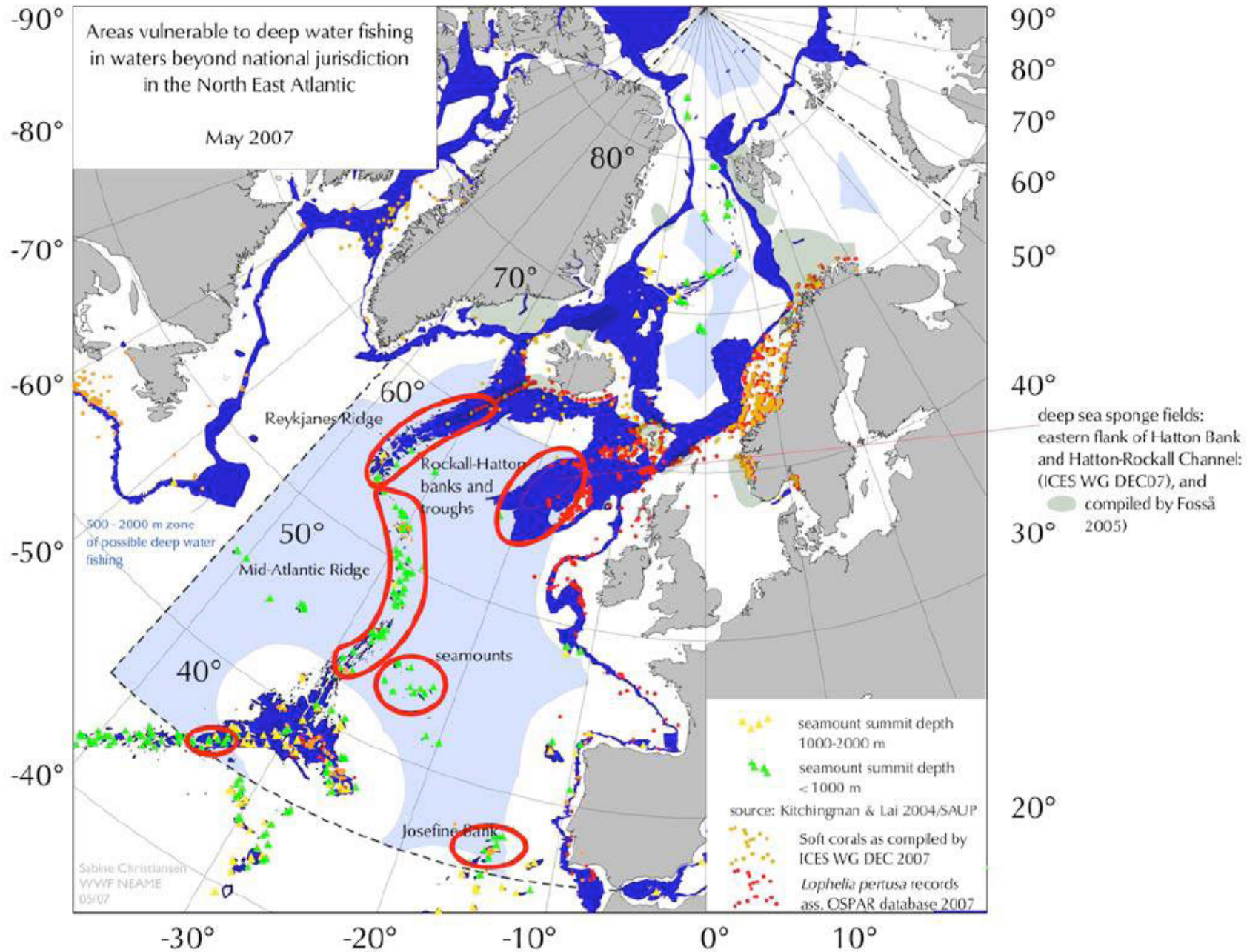
Total OSPAR Network Size: ~36 200 km²

Total NEAFC bottom fishing closures: ~42 700 km²





Application to Areas Beyond National Jurisdiction



Charlie Gibbs Fracture Zone (potential MPA)

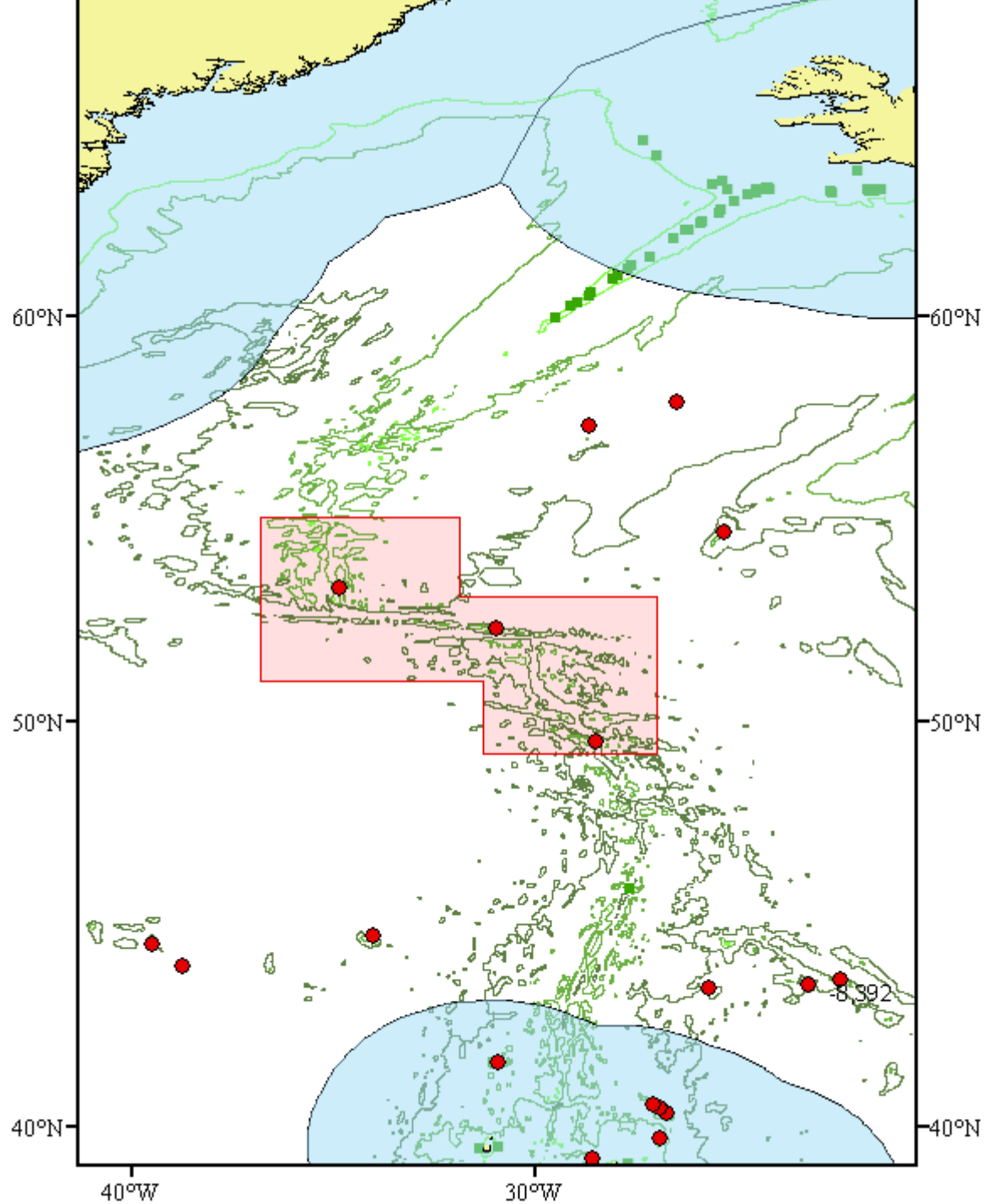
- Area 306,000 km²
- Incorporates the zone of the Sub-Polar Front, an area of raised productivity
- Aggregation area for fish, marine mammals and possibly birds
- Straddles a key biogeographic divide
- Supports a wide variety of habitats across a broad depth range
- Includes many seamounts and other habitats vulnerable to fishing impacts

Promoted as a potential OSPAR MPA

Refined by advice from deep sea scientists

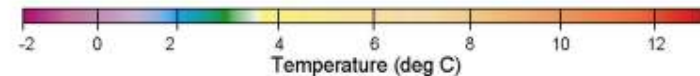
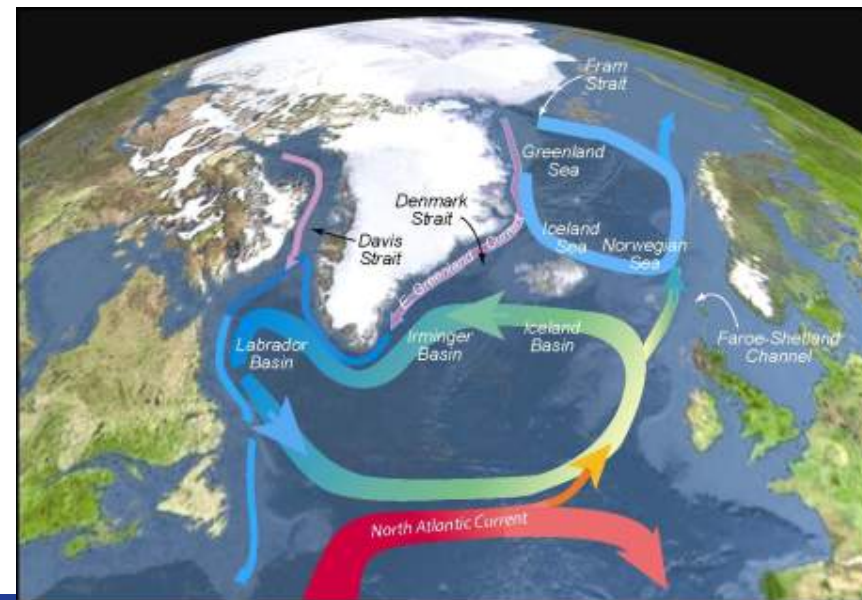
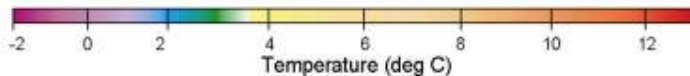
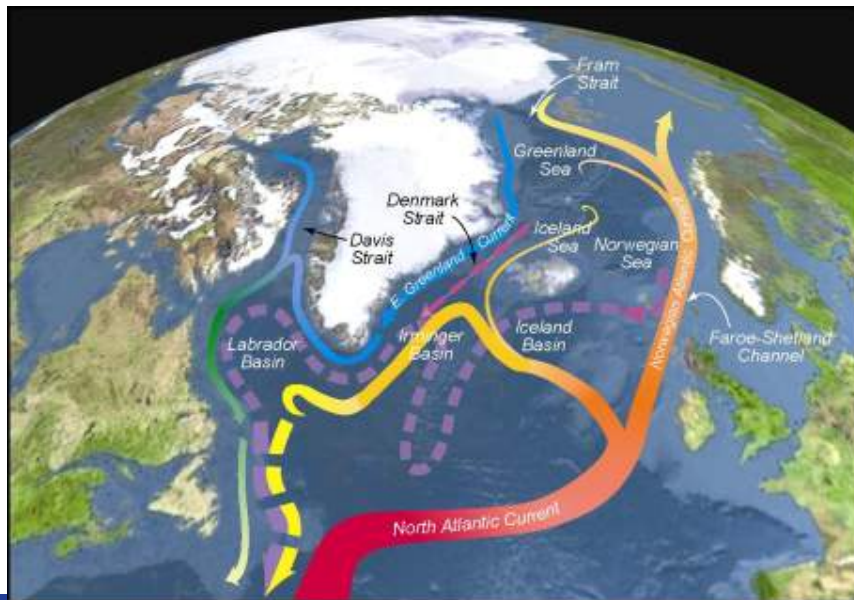
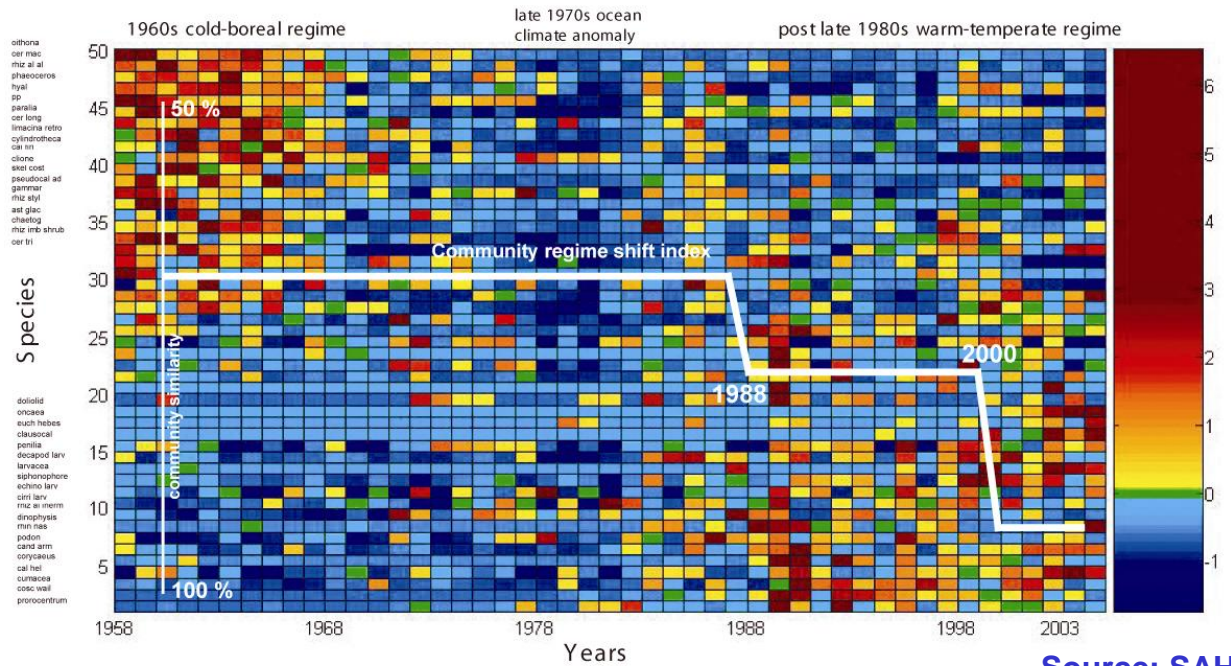
Competent authorities

- OSPAR
- NEAFC
- NATO
- NAMMCO
- NASCO
- ISA
- UNDOALOS



Ocean Chemistry

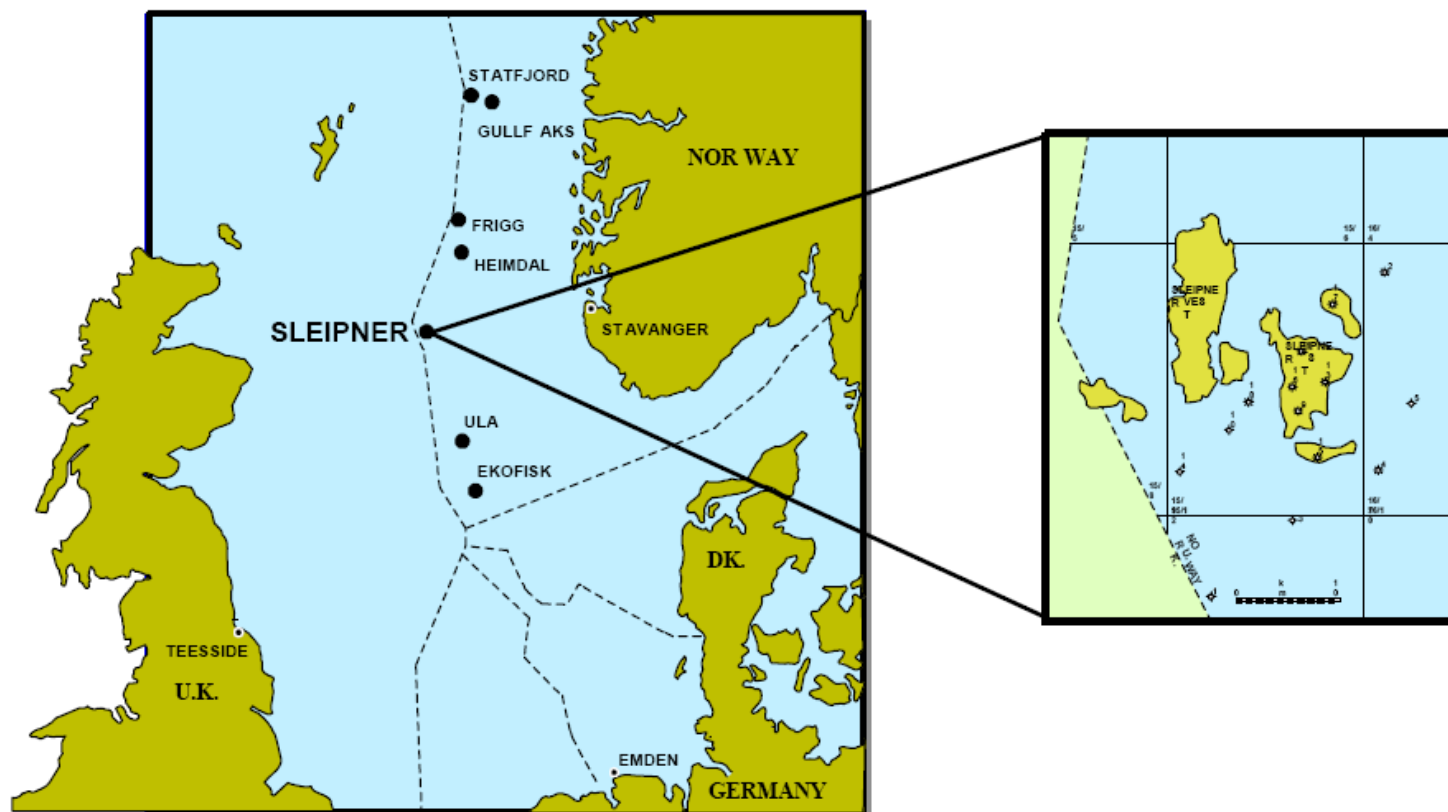
Higher temperatures
 Ocean acidification
 Plankton regime shift
 Ocean circulation?



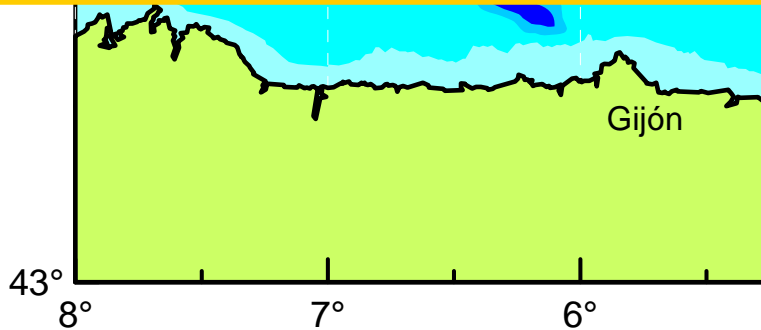
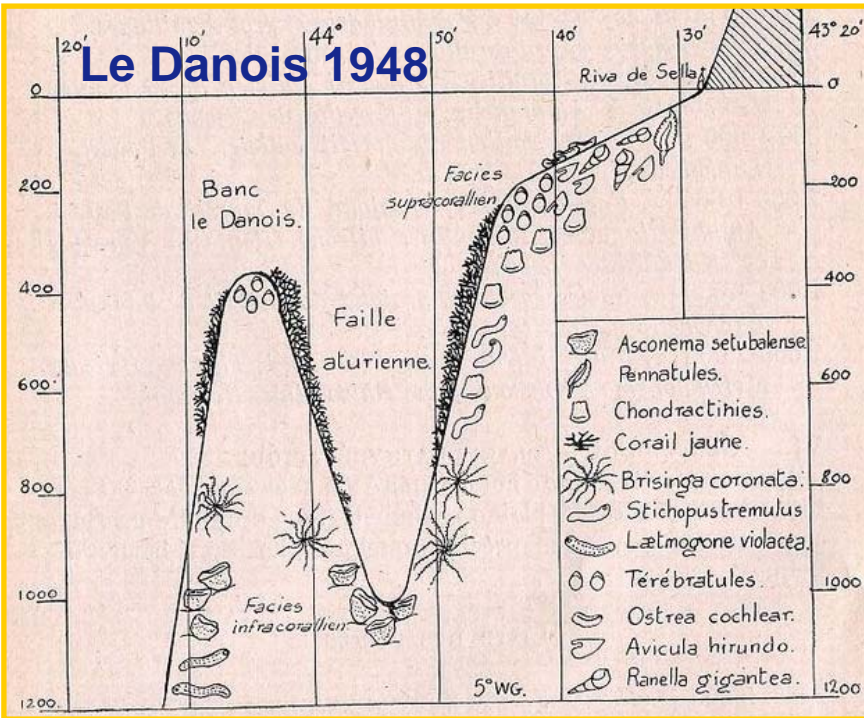
Sleipner field – CO₂ Treatment & Injection



Sleipner Field Map



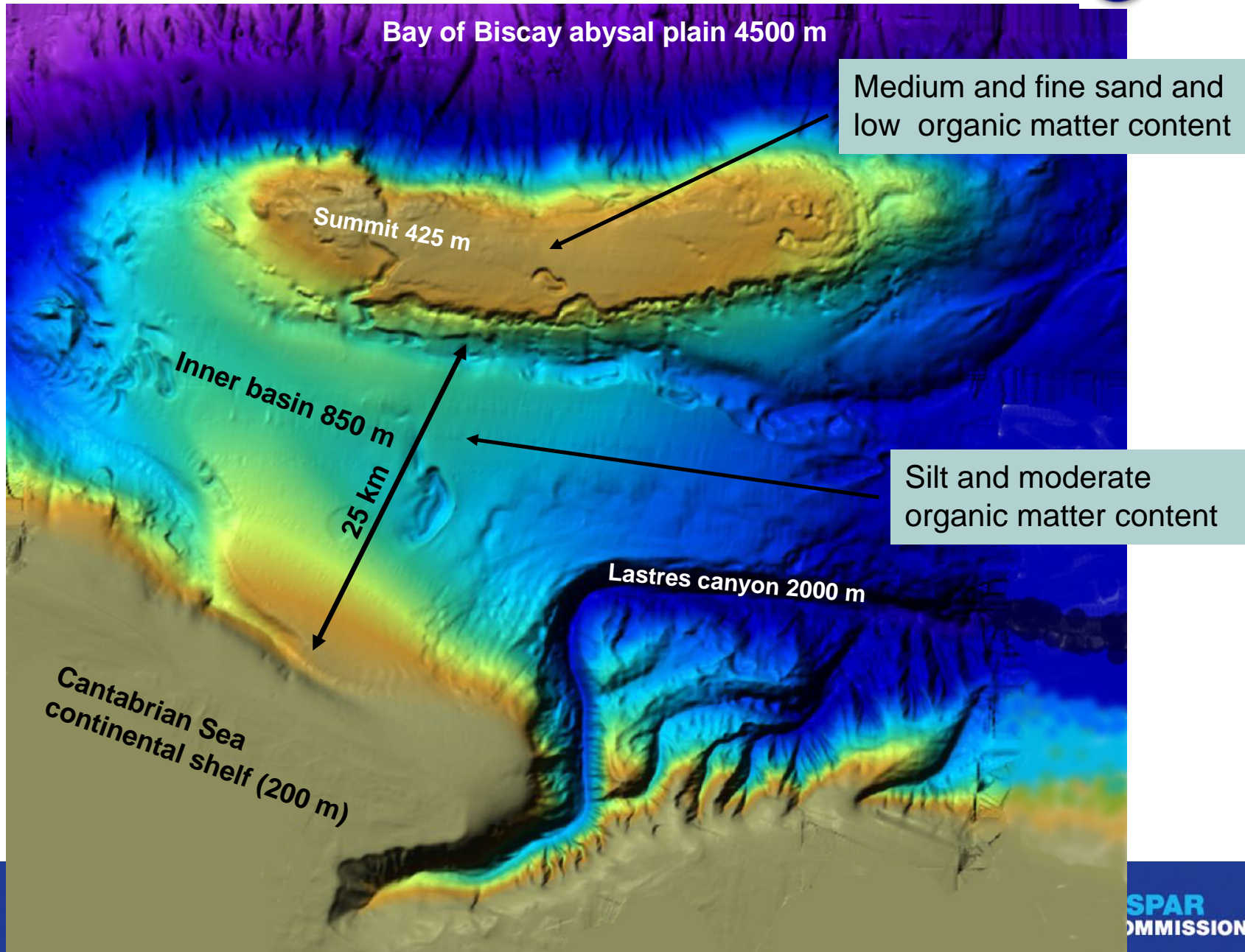
Le Danois Bank is North of Spain (Cantabrian Sea), off Ribadesella in Asturias, 65 km from the coast at longitude 5° W. The local name of the bank is “El Cachucho” fishing ground.



CACHUCHO (*Beryx decadactylus*)



Morpho-sedimentary and bathymetric characteristics



Hotspot of BIODIVERSITY



TOTAL SPECIES RICHNESS

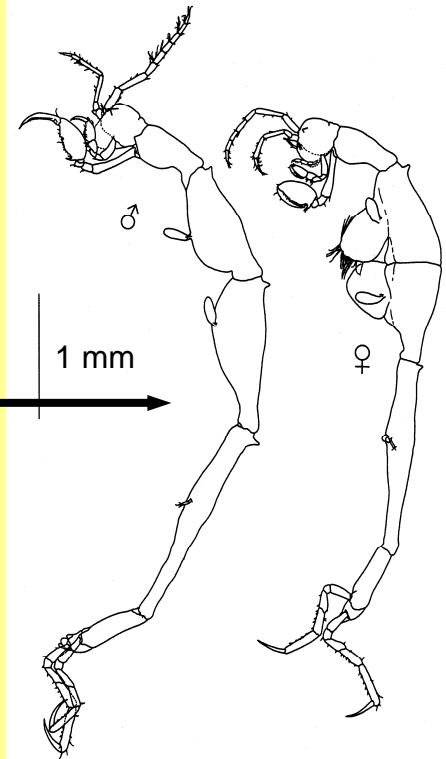


Total list of species on www.ecomarg.net

El Cachucho ecosystem include two NEW species to Science:

1. *Hoplomesus longiramus*
2. *Liropus cachuchoensis*

But the analysis is in progress.....
..... **43 species** are putatively NEW to Science

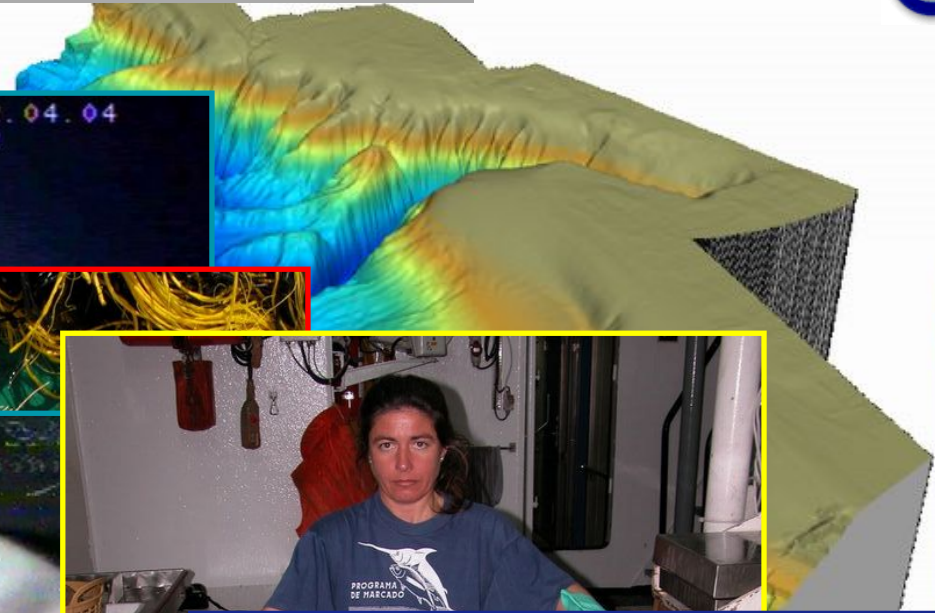
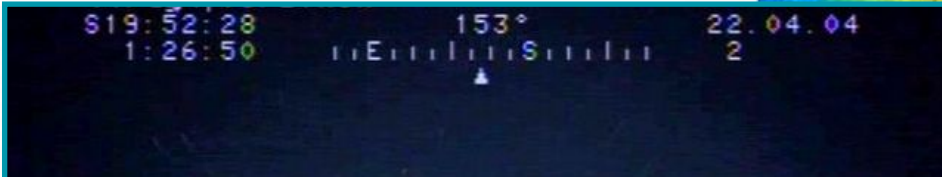


0 50 100 150 200 250 300 350 400



Ecological significance

Fragile and sensitive species



ECOLOGICAL FEATURES SUMMARY

Threatened and/or Declining Habitats of the OSPAR List:

1. Deep-sea sponge aggregations
2. *Lophelia pertusa* reefs
3. Seamounts communities
4. Sea-pen and burrowing megafauna communities



Threatened and/or Declining Species (OSPAR list):

1. Orange roughy (*Hoplostethus atlanticus*)
2. Common Skate (*Dipturus batis*)
3. Basking shark (*Cetorhinus maximus*)
4. Bluefin tuna (*Thunnus thynnus*)

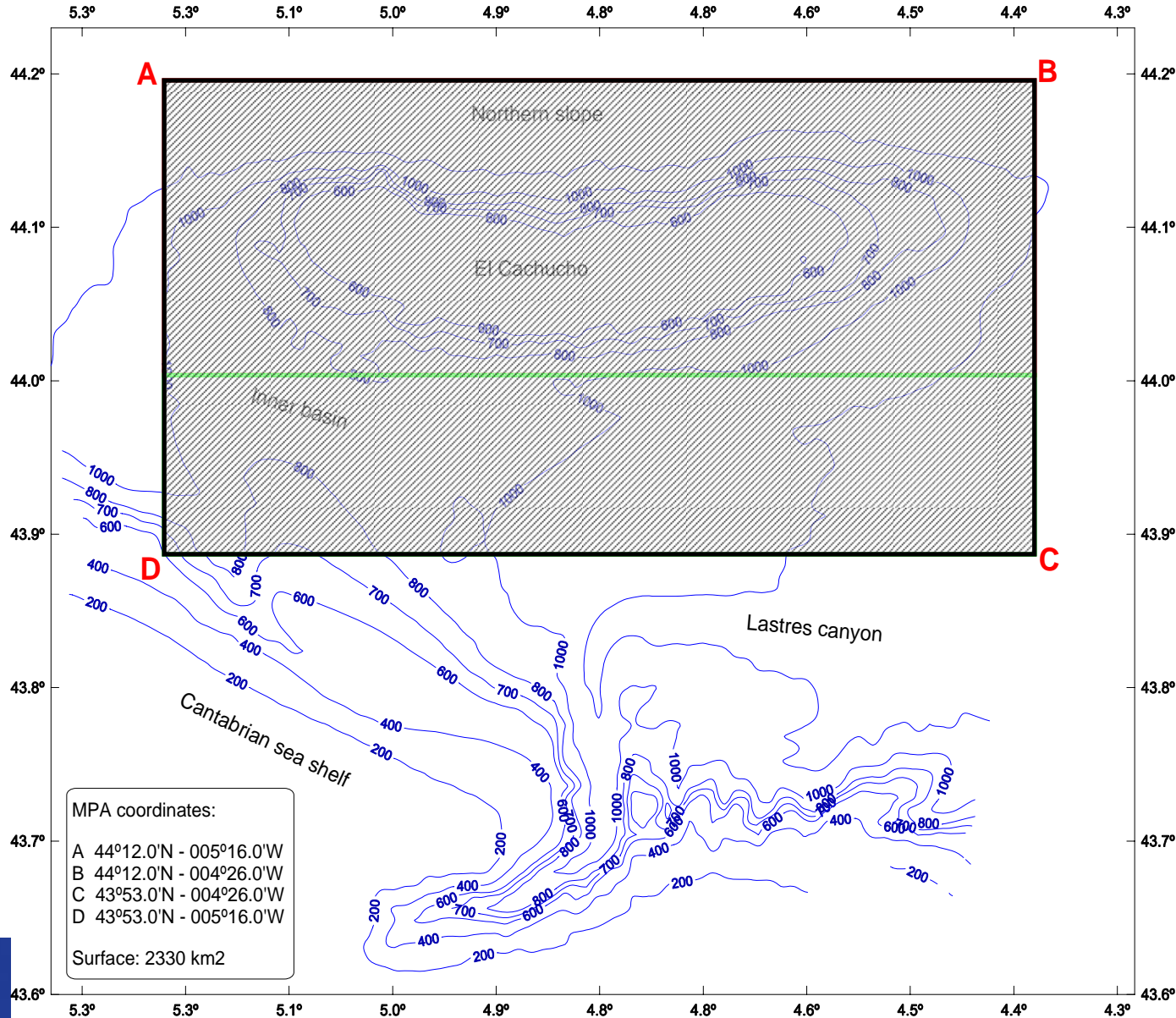


Essential Fish Habitat (EFH):

1. Forkbeard (*Phycis blennoides*) – spawners
2. Blue whiting (*Micromesistius poutassou*) – spawners
3. Anglerfish (*Lophius piscatorius*) - spawners
4. Thornyhead (*Trachyscorpia christulata*) – spawners
5. Blue-mouth (*Helicolenus dactylopterus*) – spawners



PROPOSED MANAGEMENT AND PROTECTION STATUS



CLOSED AREA

**All bottom gears:
Trawl, gillnet,
longline, traps, etc.**

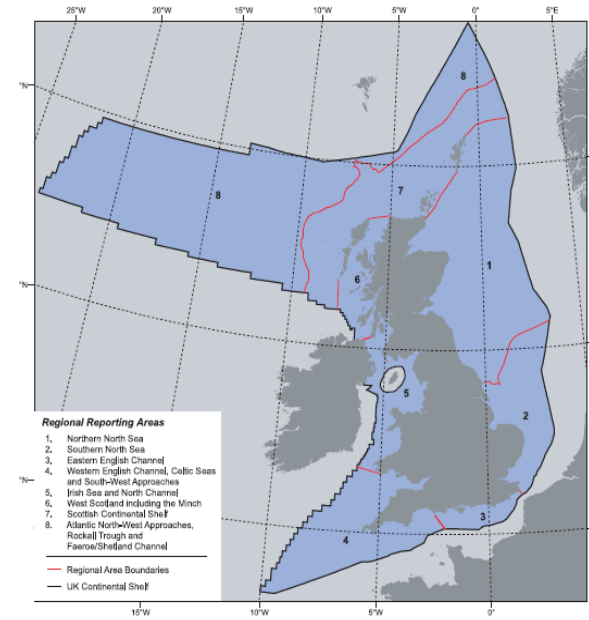
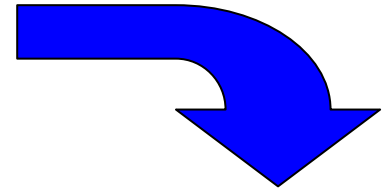
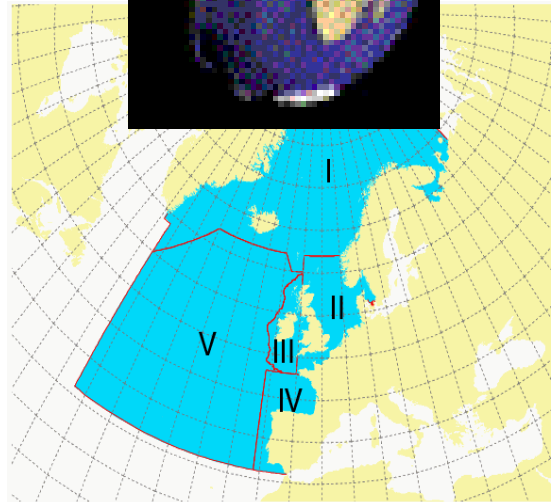
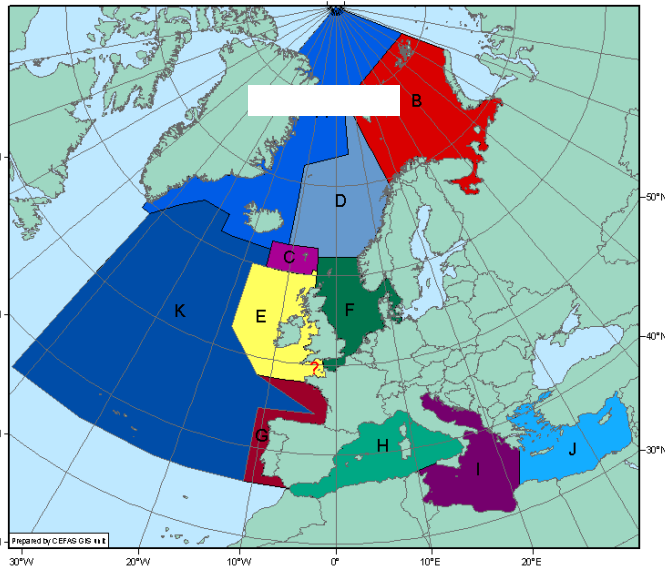
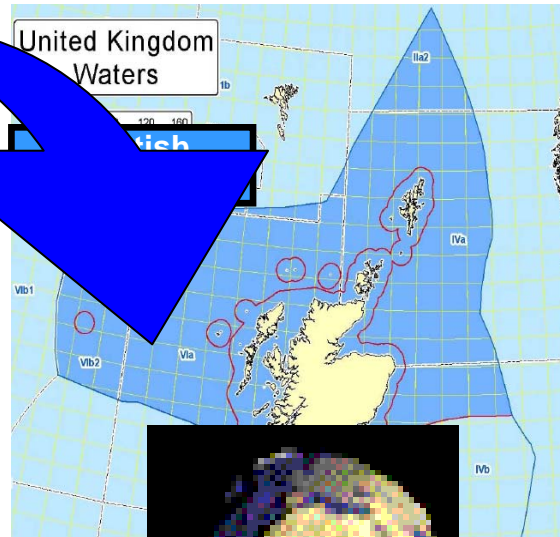
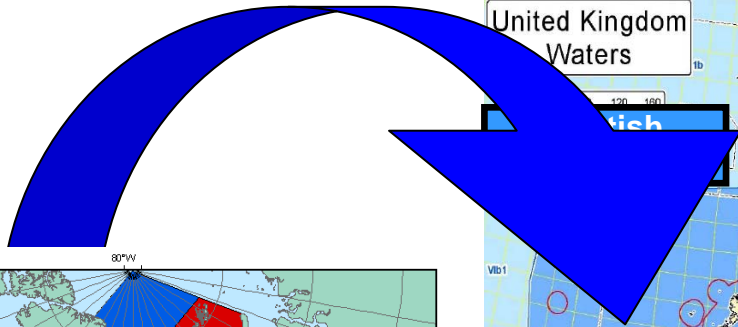
**Closed census of
longliners will be
allowed throughout
the southern area of
parallel 44.**

**No oil, gas and
mining exploration
and exploitation**

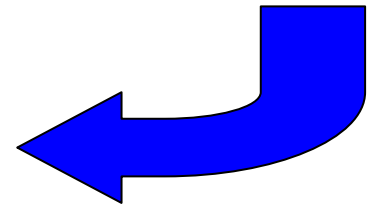
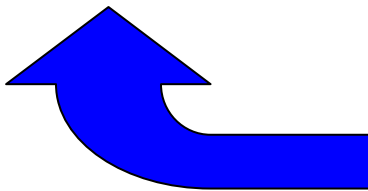
**No military
manoeuvres**

Monitoring

Source: Colin Moffat



Note: The exact limits of the UK Continental Shelf are set out in orders made in Section 1(7) of the Continental Shelf Act 1994.



A framework to define priorities

Type of impact	Activity causing impact	Plankton	Fish - pelagic	Cetaceans	Habitats	Nutrient levels	Contaminant levels
Eutrophication	Aquaculture	Phytoplankton indicator spp.					
Eutrophication	Land-based pollution	Chlorophyll a Phytoplankton indicator spp.				Winter nutrients (DIN & DIP)	
Habitat transformation	Coastal development				Littoral chalk Mudflats		
Community structure changes	Aggregate extraction				Density sensitive spp. <i>Sabellaria</i> reefs		
Community structure changes	Benthic trawling				Density sensitive spp. Maerl beds		
Removal of non-target species	Pelagic trawling		Basking shark	By-catch of Harbour porpoise			
Noise disturbance	Seismic survey						

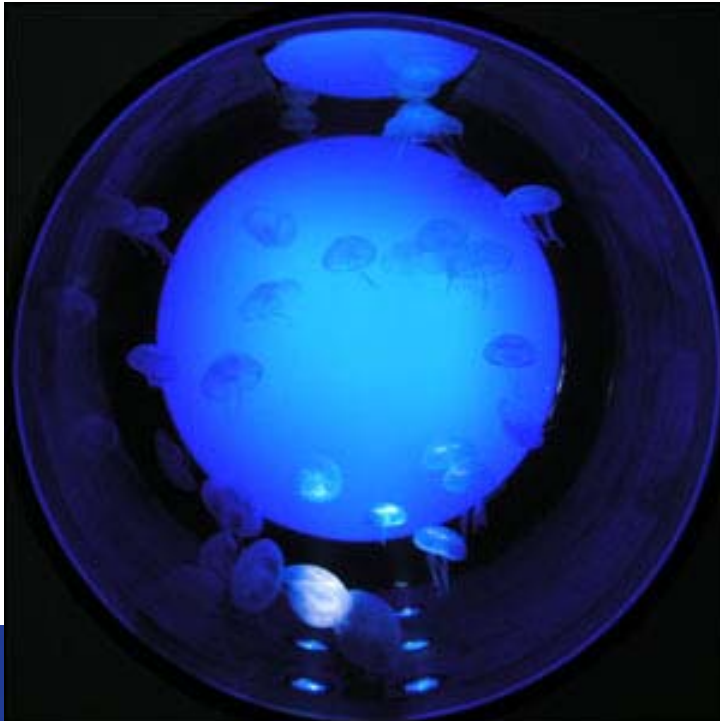
Level of impact
 Grey cells – no impact
 Yellow cells – low impact
 Tan cells – moderate impact
 Orange cells – high impact

Ecosystem components
 Linked to EcoQO elements, OSPAR Strategies and MSD Annex II categories

State & pressure/impact indicators
 Blue text - EcoQO
 Black text – OSPAR List species or habitat

Pressure & impact
 Based on MSD Annex II

QSR 2010 – information synthesis



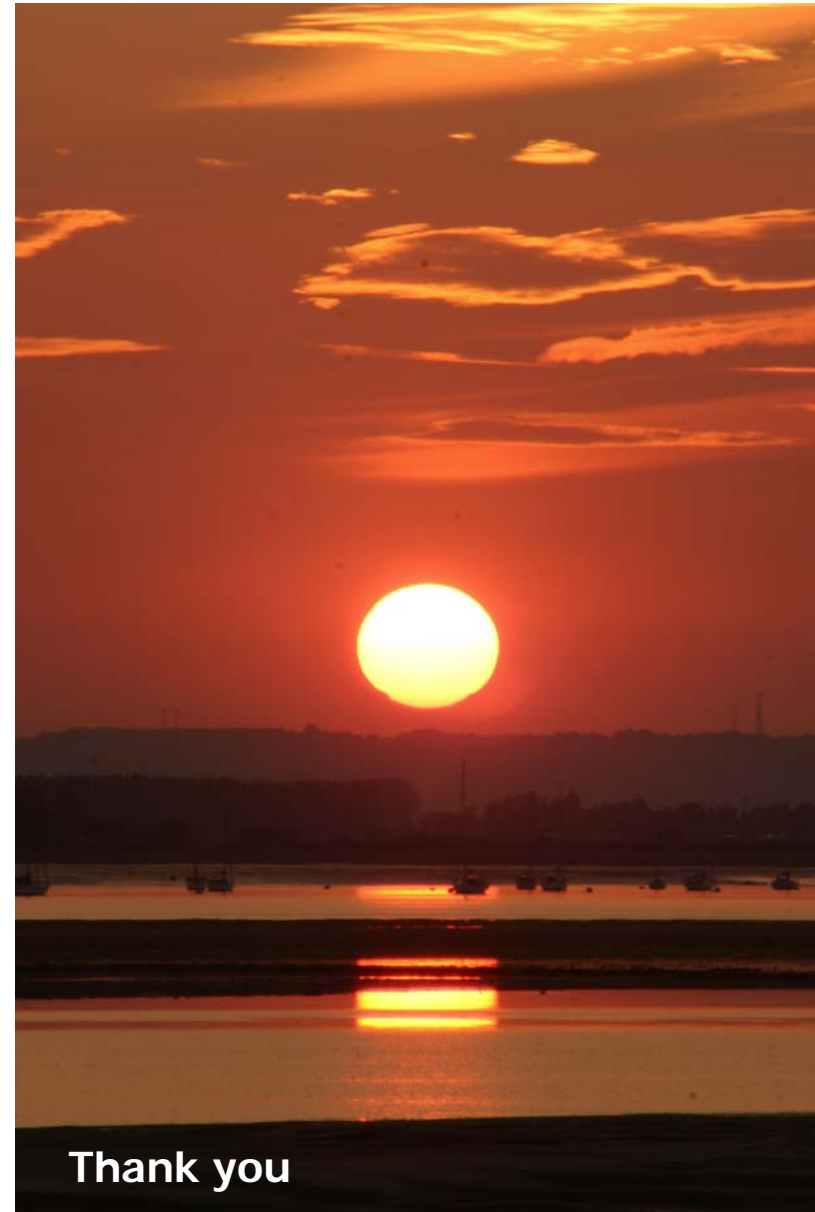
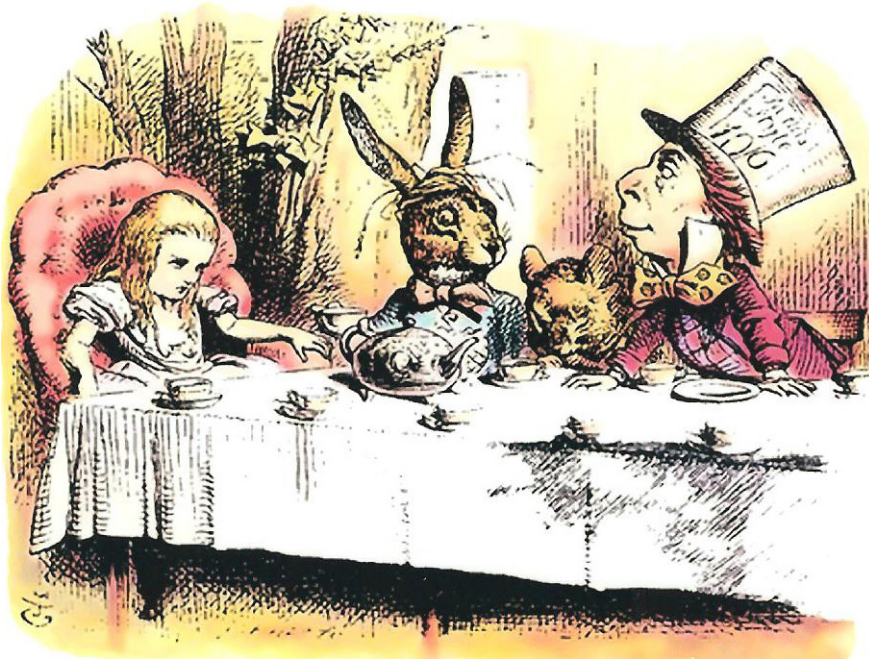
Conclusion

2010 is a critical year for OSPAR *Why?*

- Ministerial Meeting (Joint Ministerial commitment with HELCOM)
- QSR 2010
- Evaluation of whether OSPAR targets have been met and/or were realistic when agreed
- Complementary initiatives (CBD, EEA, Census of Marine Life)
- Redefinition of OSPAR Strategies and JAMP to reflect emerging issues



Sometimes sharing
good practice is more
complicated than
considered at the
start



Thank you