



Proteus Partners Annual Meeting 2015

London June 2015



UNEP



WCMC

proteus

ExxonMobil



TOTAL



RioTinto





Welcome & Introduction

Jon Hutton
Director UNEP-WCMC



Plotting the course of the UNEP-WCMC Marine Programme

Steve Fletcher
Head of Marine Programme UNEP-WCMC





Plotting the course of the UNEP-WCMC Marine Programme

Dr Steve Fletcher, Head of Marine Programme, UNEP-WCMC





UNEP WCMC









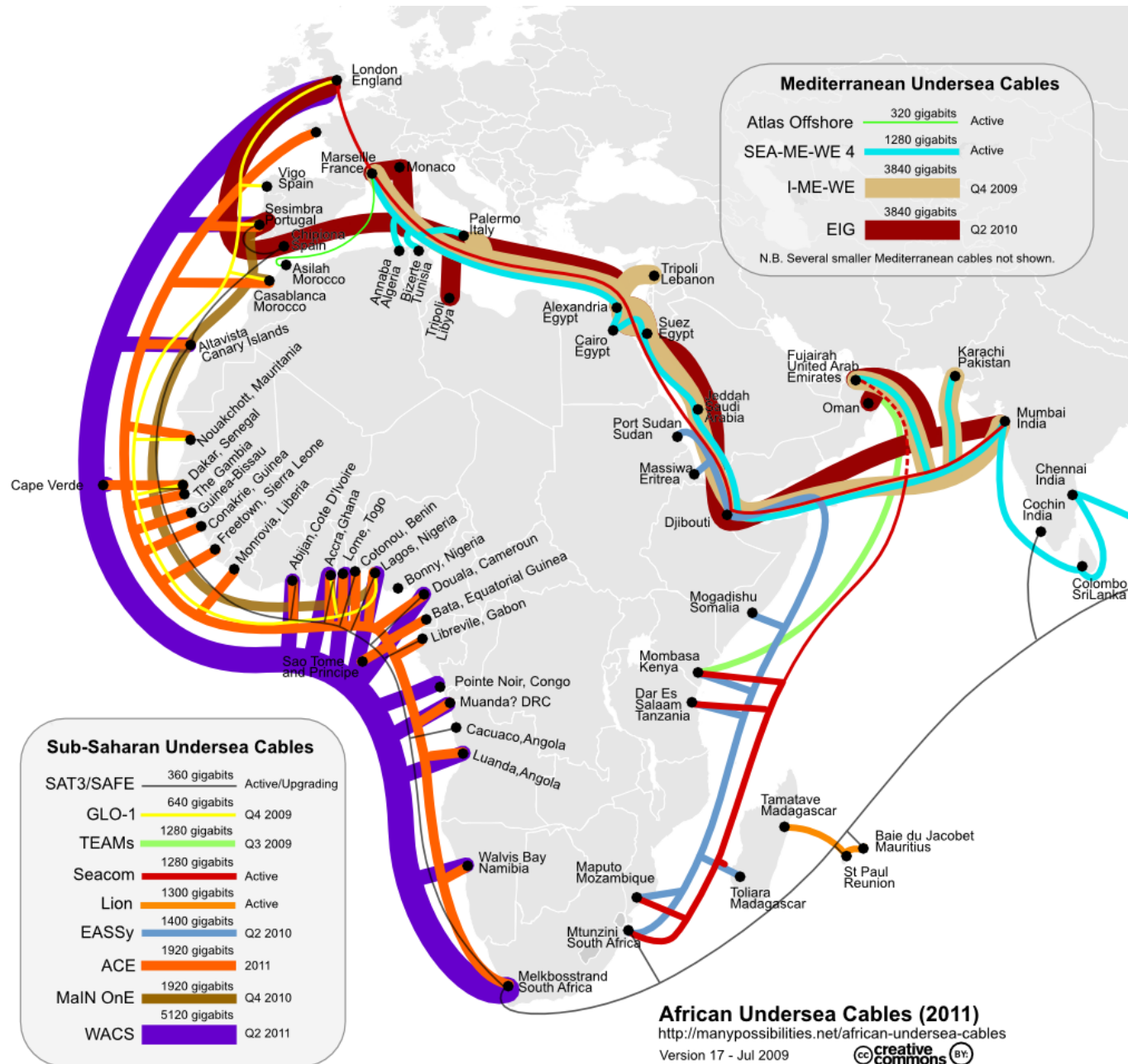












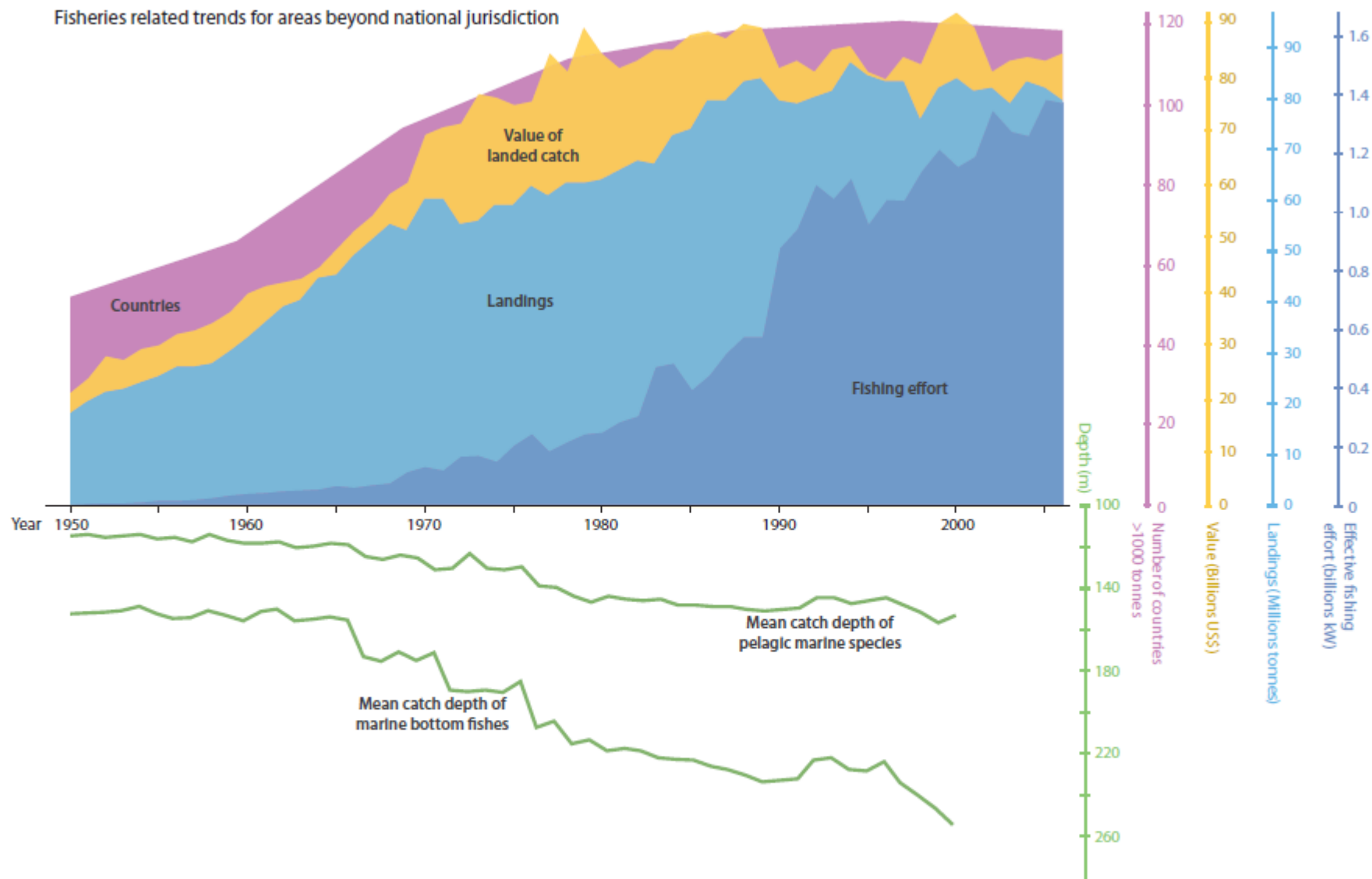


Fig. 2. Trends in the use of living marine resources in areas beyond national jurisdiction. (1) Number of countries involved in the HS fisheries (1950–2006; [Sea Around Us Project, 2013](#)). (2) High seas fisheries – Cumulative US\$ Value of fish caught in areas beyond 200 mile territorial limit of nations between 1950 and 2006 (Real 2000 value – US\$; [Sea Around Us Project, 2013](#)). (3) High seas fisheries – volume landed in areas beyond 200 mile territorial limit of nations between 1950 and 2006 (tons; [Sea Around Us Project, 2013](#)). (4) High Seas fisheries – Effective fisheries effort (billions kW; [Sea Around Us Project, 2013](#)). (5) and (6) Global estimates of trends of mean depth of world capture fisheries catches from 1950 to 2001 for all marine fishes including pelagic species and for benthic species only. Adapted from [Morato et al. \(2006\)](#).

Other human use trends for areas beyond national jurisdiction

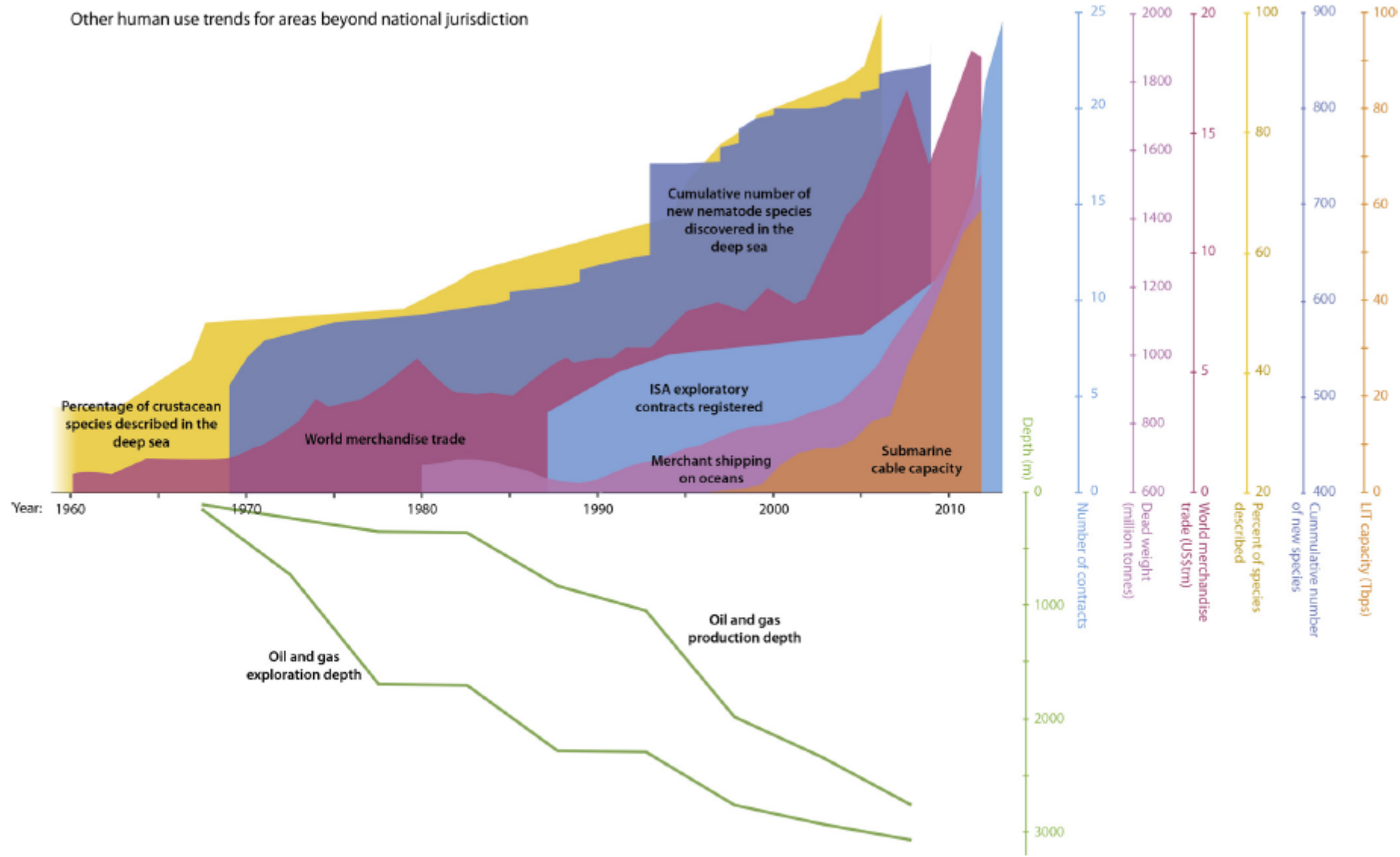


Fig. 4. Other trends in human uses in areas beyond national jurisdiction. (1), (2) Nematodes (a) and crustacean (b) species discovered and described in the Deep sea (adapted from Ramirez-Llodra et al., 2011, and Godet et al., 2011). (3) World Merchandize Trade (2012 prices*, \$trillion adapted from Economist 2013). (4) Number of exploratory contract applications lodged at the International Seabed Authority for polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts (ISA, 2013). (5) Global tonnage (dead weight tons) shipped on Oceans 1980–2012 (IMO, 2012). (6) Submarine Cable Capacity (LIT Capacity (actual traffic-carrying capability of the system) – Terabits per second). Adapted from Telegeography (2013). (7), (8) Maximum water depth of Oil Exploration (in meters) and of Oil Production (in meters). Adapted from World Energy Outlook, IEA (2008).



“The 'blue' economy represents roughly 5.4 million jobs and generates a gross added value of almost €500 billion a year. However, further growth is possible in a number of areas” (European Commission 2012).



The **5** Blue Growth sectors



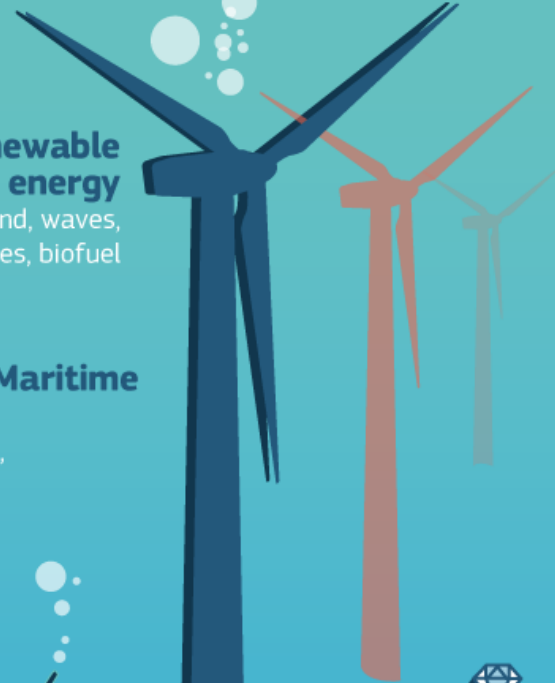
Biotechnology

medicines,
industrial enzymes



Renewable energy

wind, waves,
tides, biofuel



Coastal & Maritime Tourism

coastal tourism,
cruise tourism,
yachting



Mineral resources

gravel, sand,
zinc, cobalt,
copper



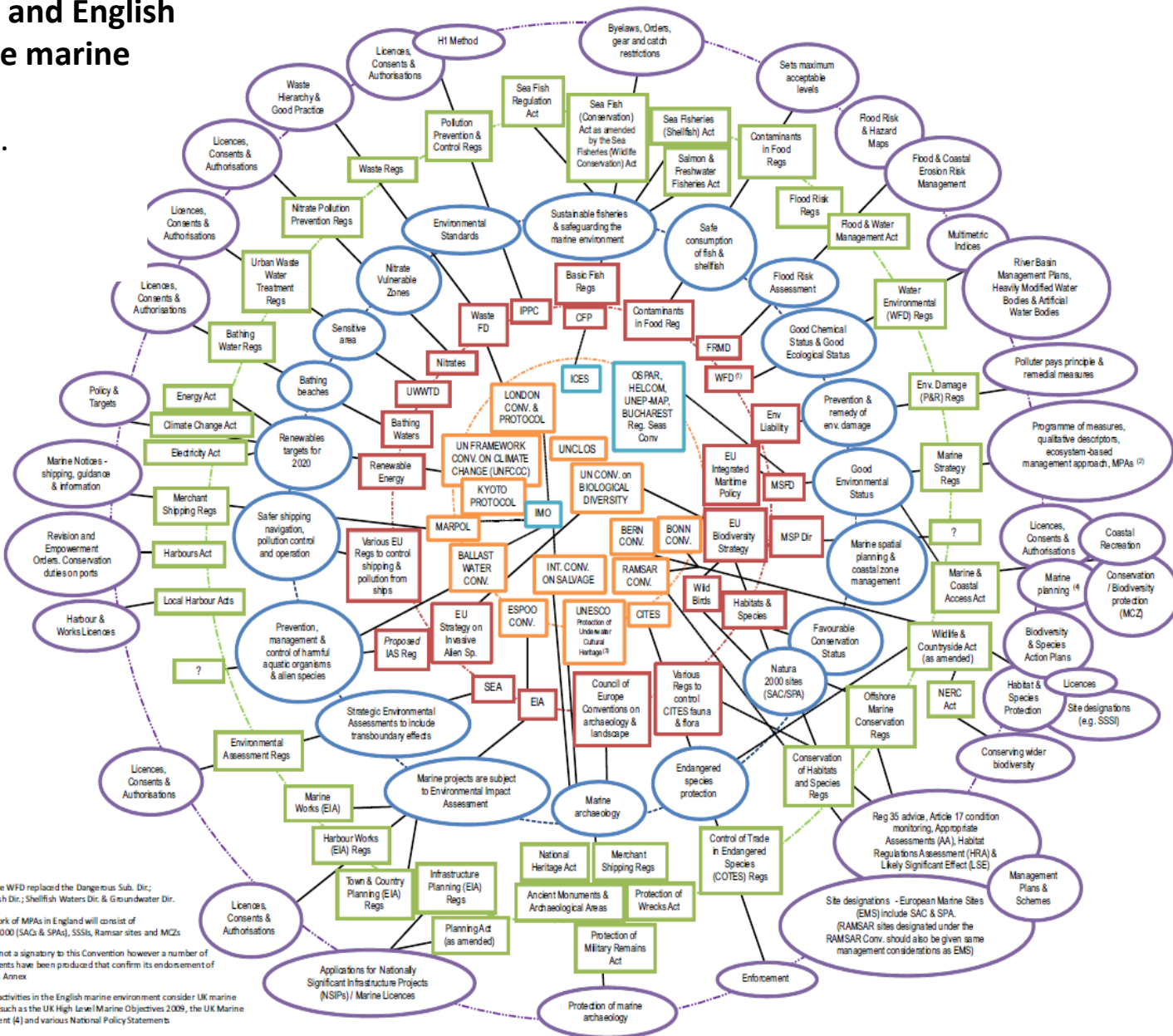
Aquaculture

farming of fish,
shellfish, marine plants



UNEP WCI

International, European and English legislation protecting the marine environment (Boyes and Elliott, 2014).



(1) In 2013 the WFD replaced the Dangerous Sub. Dir.; Freshwater Fish Dir.; Shellfish Waters Dir. & Groundwater Dir.
 (2) The network of MPAs in England will consist of EMS/Natura 2000 (SACs & SPAs), SSSIs, Ramsar sites and MZs
 (3) The UK is not a signatory to this Convention however a number of public statements have been produced that confirm its endorsement of the rules in its Annex
 All regulated activities in the English marine environment consider UK marine policy drivers such as the UK High Level Marine Objectives 2009, the UK Marine Policy Statement (4) and various National Policy Statements



Fig. 1. International, European and English legislation giving protection to the marine environment.

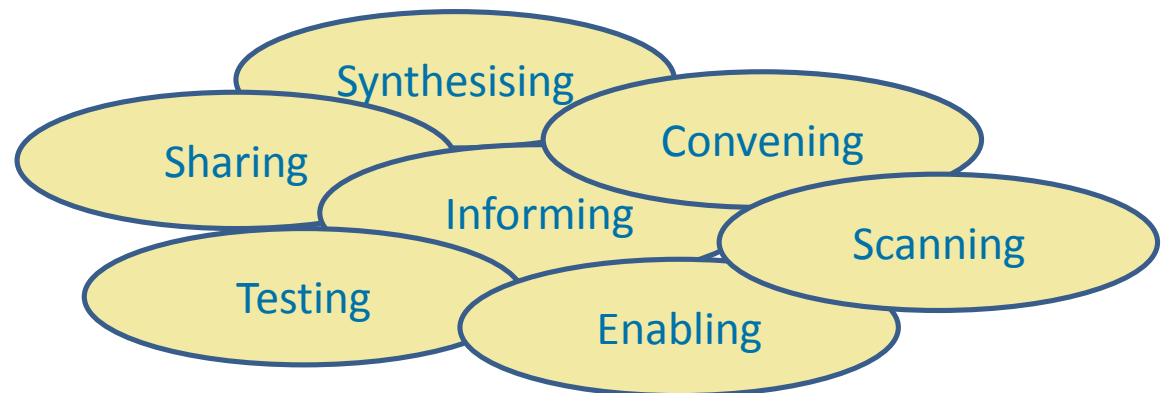


UNEP-WCMC Marine Programme

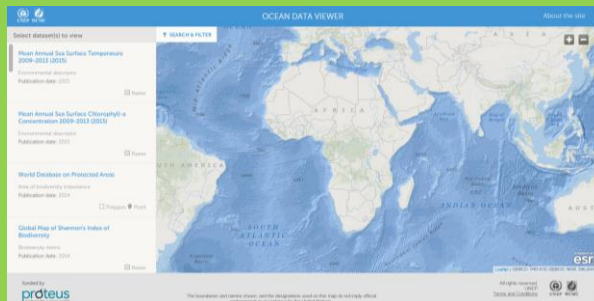
Aim: To put biodiversity at the heart of marine decision-making.

Through:

1. Collating, analysing and interpreting information about marine biodiversity, and sharing this in engaging, innovative and useful ways.
2. Strengthening the capacity of others to manage marine biodiversity and ecosystem services effectively.



Global Oceans Biodiversity Data



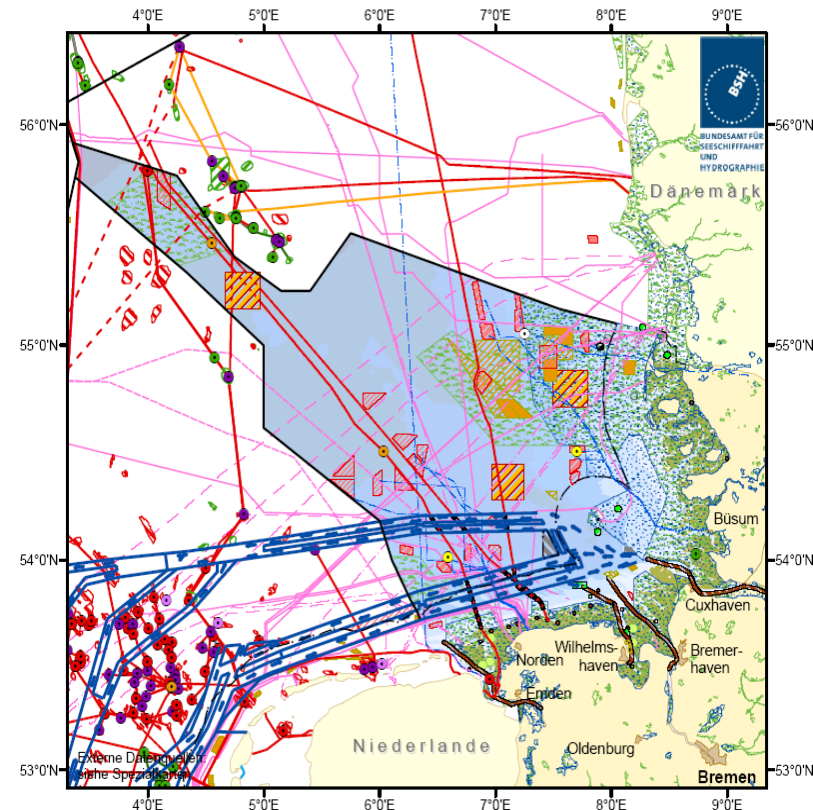
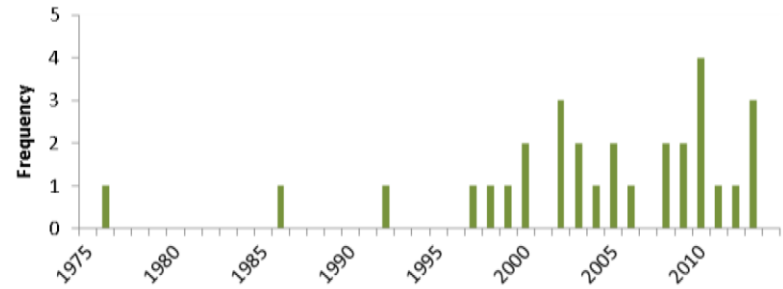
**Evidence compilation
and analysis**

**Testing and refining
marine decision-making
processes**

**Integration and
communication**

Marine Spatial Planning

- MSP is the development context for the oceans.
- Global review of MSP practice to identify effective practices.
- Testing new approaches to MSP.
- Streamlining MSP decisions and data use.



Biodiversity effects of marine infrastructure

- Net positive impact from individual and networks of marine structures.
- Biodiversity effects during construction, active life and decommissioning.
- Seeking linkages with MSP to support biodiversity conservation that generates societal benefits.



Returning to port

Identify **leverage points** where reliable evidence would generate net positive impacts for biodiversity and industry...

1. What evidence syntheses would be useful?
2. What horizon scans would be useful?





Contact

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OSPAR and environmental protection

Luisa Rodriguez Lucas
Deputy Secretary, OSPAR Commission / Bonn Agreement





OSPAR
COMMISSION

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

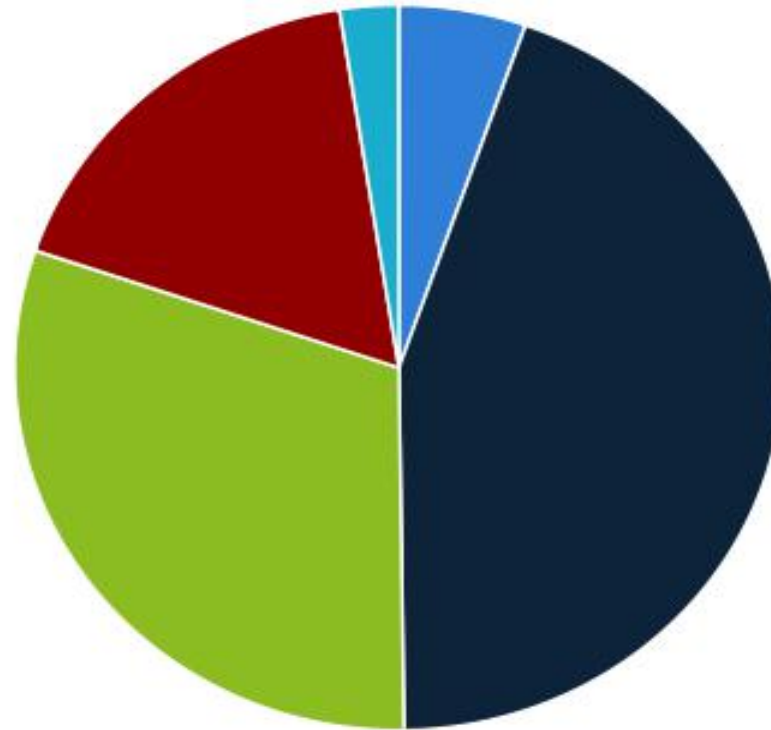
Protecting and conserving the North-East Atlantic and its resources



© IFREMER

Dr Luisa Rodriguez Lucas, Deputy Secretary
Proteus Annual Meeting (London, 9-10 June 2015)

How familiar are you with the work of OSPAR?



- I have heard of OSPAR but don't know what it does (5.35%)
- I am somewhat familiar with the work of OSPAR (44.44%)
- I am very familiar with the work of OSPAR (30.45%)
- I work with the OSPAR Commission (17.28%)
- I have never heard of OSPAR (2.47%)

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

Periodic Table of the European Marine/Maritime Elements

Esf ESF															Ar ARCIC	Ices ICES	Cies CIESM	Bsc BLACK	
Mb MB	Eea EEA															Af NEAFC	Mf GFCM	As NASCO	At ICCAT
Erc ERC	Ms EMSA															Os OSPAR	He HELCOM	Ba BARC	Bc BUCA
Jpi JPI	Fc EFCA	Mse EMSEA	Mo MYOCEAN	Es GMES	Ms MARS	Bde MARBEF	Msc MARCOM	Eco EMECO	Euo EUROCEAN	Fo JUTURE OCEAN	Los UNOCLOS	Cc UNFCCC	Lp LOLP	Bl BALLAST	Cb CBD	St STOCKOL	Ci CITES		
Df DRAEGER	Jrc JRC	Wa WISE	Ind MAR FORUM	Odr ECORD	Eng DEAN ENERC	Clu ENMC	Meg EMEC	Og OGP	Fish RACS	Sp CMAS	Msp EU	Cca EU	Bg EU	Bs EU	Re EU	Msf EU	Imp EU		
Pa PRINCE	Rea REA	Dnet EMODNET	Sl PSMSL	Obis OBIS	lode IODE	Ices ICES	Fp FP7	Ot OCEAN TOM	H2o HORIZON 202	Ms NSF-MS	Ms EU	Bw EU	Wf EU	Ha EU	Na EU		Cfp EU		
La LUSO-A	Esa ESA	Cr WCRP	Gb IGBP	Bd DIVERSITAS	Hd IHDP	Oo GOOS	Eo GOE-GEOSS	Oc IOCCP	Sl GLOSS	Om JCOMM	Oc CLIVAR	Loi LOICZ	Hab HAB	Cc IPCC	Woa WOA	Bs IPBES	Fa SOFIA		

EU Marine International Scientific Councils	Databases
EU Regional Fisheries Organizations	International Programmes (IPO in Europe)
EU Regional Conventions	Funding instruments
UN conventions and treaties	Reporting Processes
EU legal framework on marine/maritime affairs	UN specialized agencies with marine/maritime mandate
Think tankers	Other marine International Organizations in Europe
European specialized agencies	Main Marine/Maritime NGOs in Europe
European Marine Scientific Clusters	Other main International NGOs
European Maritime Clusters	UN Funding instruments

Cbd CBD	Fao FAO	Iaea IAEA	Imo IMO	Isa ISA	De UN-DESA	Do DOALOS	Dp UNDP	Ep UNEP	Ioc UNESCO-IOC	Ido UNIDO	Wmo WMO	Wb WB	Iho IHO	loi IOI	Ge GESAMP	UN UN-OCEANS
Icsu ICSU	Iucn IUCN	Po POGO	Idi IDDRI	Won WON	Mcf MCF	Sea EAS AT RIS	Wwf WWF	Ps LASTICS SOURCE	Gp GREENPEACE	Ci CI	Pew PEW	Oc OCEANA	Sc SCOR	Gof GOF	Gef GEG	Gpo WB-GOP

OSPAR Convention

Main Objectives

The Contracting Parties shall, in accordance with the provisions of the Convention, take all possible steps to **prevent and eliminate pollution** and shall take the necessary measures to **protect the maritime area against the adverse effects of human activities** so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected” (Article 1.a)

Guiding Principles

- Ecosystem Approach
- Precautionary Principle
- Polluter Pays principle
- Best Available Techniques (BAT) and Best Environmental Practices (BEP)



OSPAR Strategy

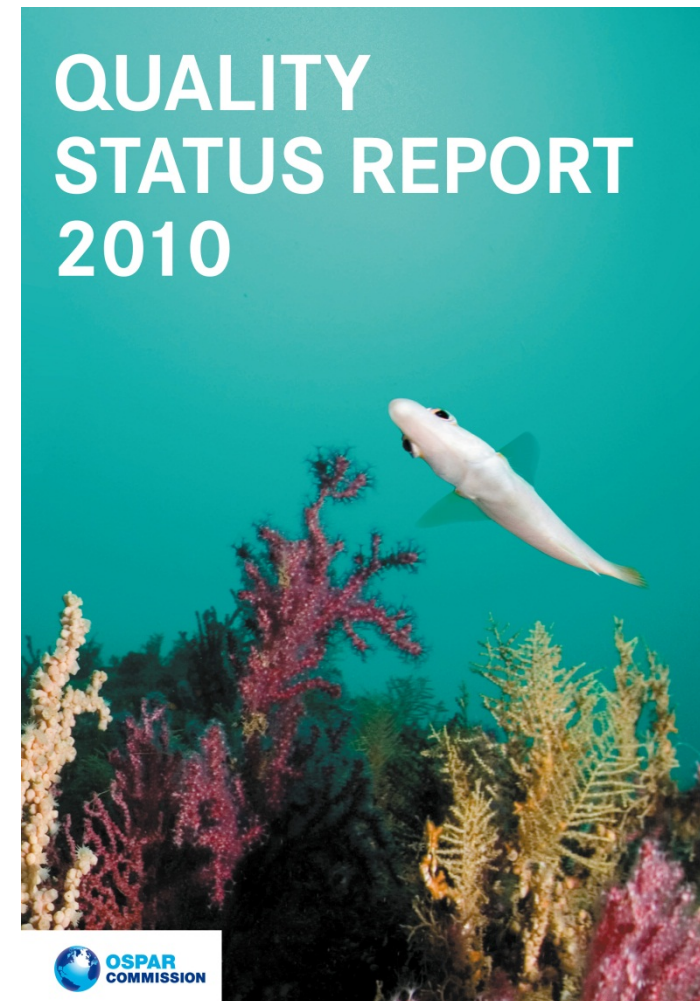
The North-East Atlantic Environment Strategy

Part I: Implementing the Ecosystem Approach

Part II: Thematic Strategies

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

The Joint Assessment and Monitoring Programme (JAMP)



OSPAR Monitoring Programme: JAMP



QUALITY STATUS REPORT 2010

CHAPTERS

- 1 THE QUALITY STATUS REPORT 2010
- 2 THE NORTH-EAST ATLANTIC
- 3 CLIMATE CHANGE
- 4 EUTROPHICATION
- 5 HAZARDOUS SUBSTANCES
- 6 RADIOACTIVE SUBSTANCES
- 7 OFFSHORE OIL AND GAS INDUSTRY
- 8 USE OF LIVING MARINE RESOURCES
- 9 OTHER HUMAN USES AND IMPACTS
- 10 PROTECTION AND CONSERVATION OF BIODIVERSITY AND ECOSYSTEMS
- 11 TOWARDS ECOSYSTEM ASSESSMENT
- 12 REGIONAL SUMMARIES

QSR ASSESSMENTS

KEY TERMS

DOWNLOADS

SEARCH...



WELCOME TO THE QSR 2010!

Human activities at sea and on land as well as the emerging threats of climate change put considerable pressures on marine ecosystems. The QSR 2010 is a milestone for evaluating the quality status of the North-East Atlantic and for taking forward OSPAR's vision of a clean, healthy and biologically diverse sea. Ten years of joint monitoring and assessment by OSPAR Contracting Parties of the marine environment provides the scientific basis for this holistic report, which has been prepared based on the expertise of the many experts from OSPAR Governments and stakeholders who provided input to OSPAR Working Groups and Committees. A peer review by a group of international scientists coordinated by the International Council for the Exploration of the Sea, and an e-consultation have both helped to critically review the gathered evidence and the conclusions drawn.

This electronic publication presents the QSR 2010 summary report together with its suite of supporting thematic assessments to take stock of achievements in the period 1998–2008, to identify priorities for action, and to provide a baseline for future assessments of the quality status of the North-East Atlantic.

→ Key Findings



Watch the QSR 2010 video (allow time to load)



Download the QSR 2010 poster

JAMP

General parts

Theme A - General & Ecosystem approach

Theme E

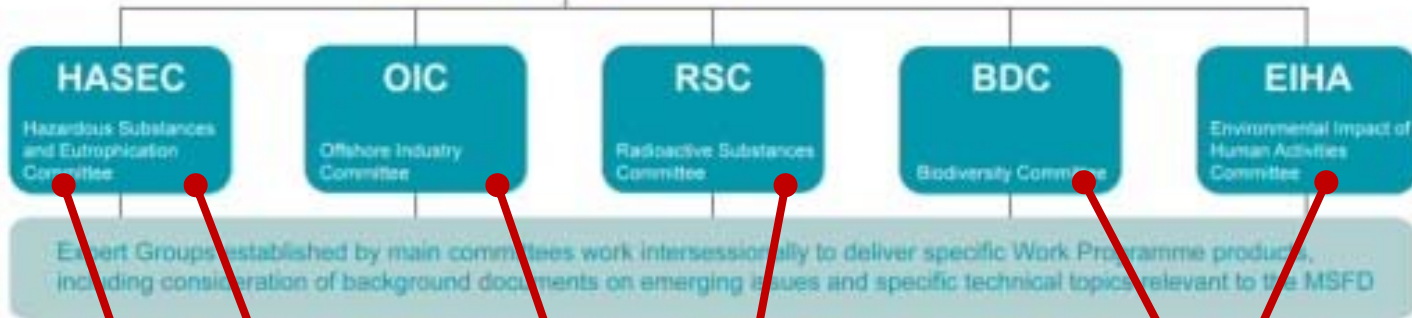
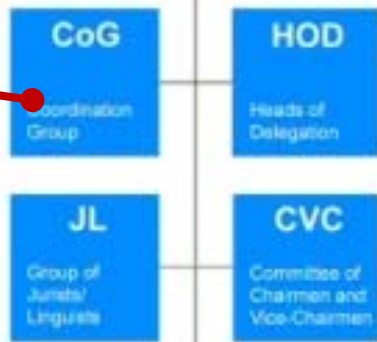
Theme H

Theme O

Theme R

Theme B

**OSPAR
Commission**

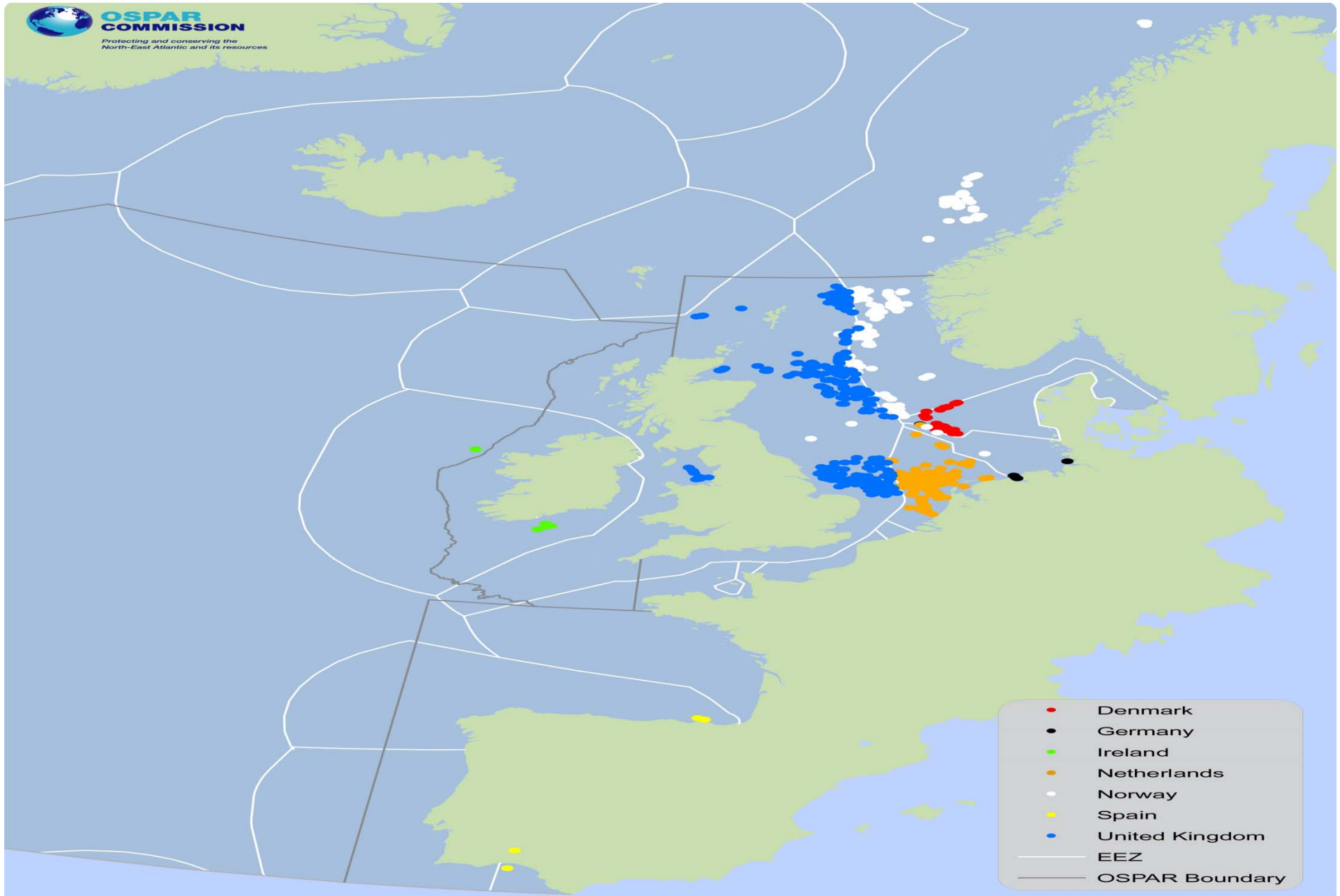


Achievements: 35-year track record

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 (83% α -emitting substances/78% β -emitting substances)
Offshore oil and gas installations	All aspects now regulated, environmental goals for reducing oil in produced water + chemical use
Offshore windfarms	Agreement on licensing, guidance on site selection and construction
Marine biodiversity conservation	Ecological quality objectives for a healthy North Sea, List of threatened/declining species and habitats, MPA and marine spatial planning initiatives
Monitoring and assessment	Comprehensive monitoring of substances. JAMP. QSR 2010.



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



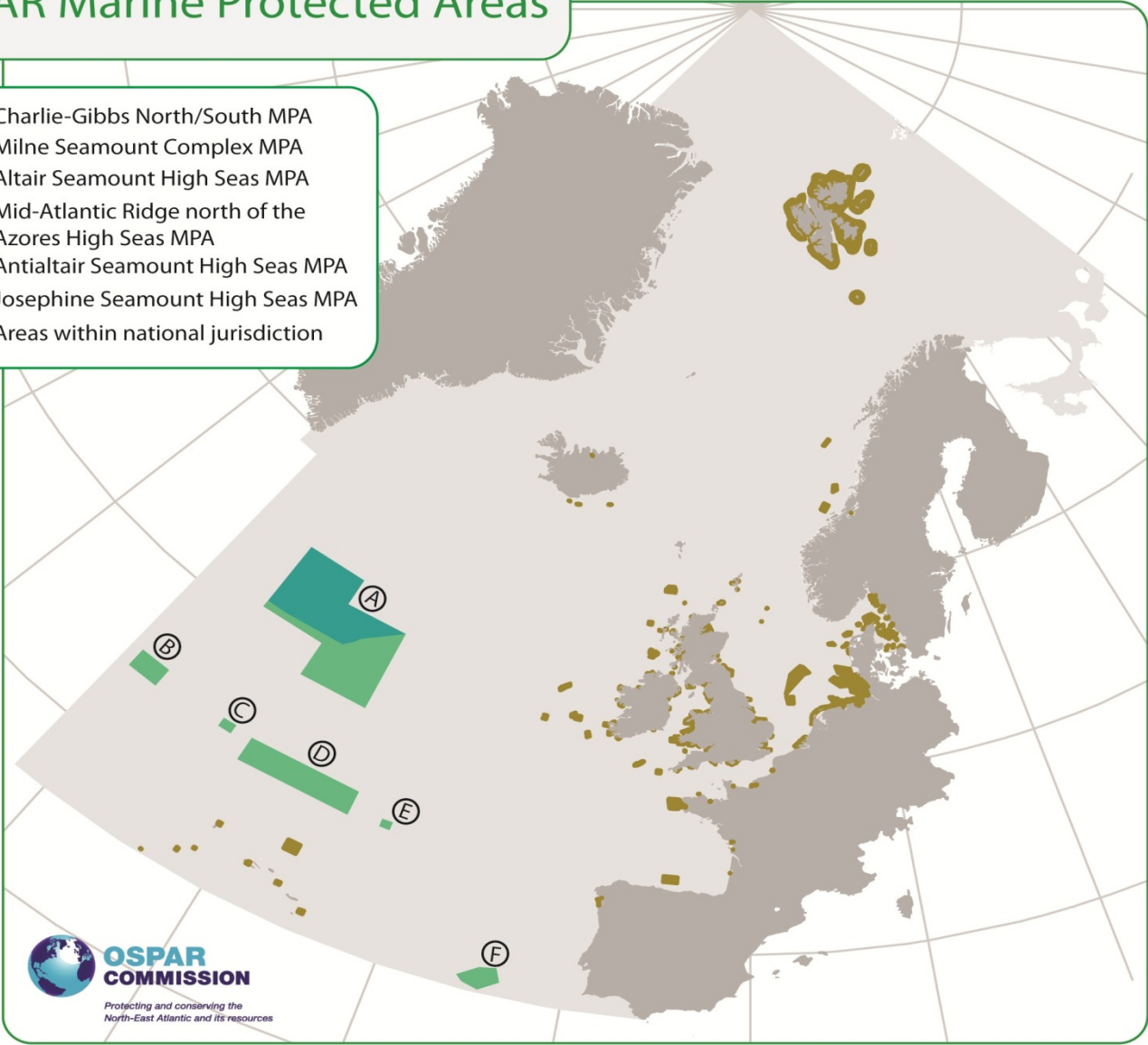
- Denmark
- Germany
- Ireland
- Netherlands
- Norway
- Spain
- United Kingdom
- EEZ
- OSPAR Boundary

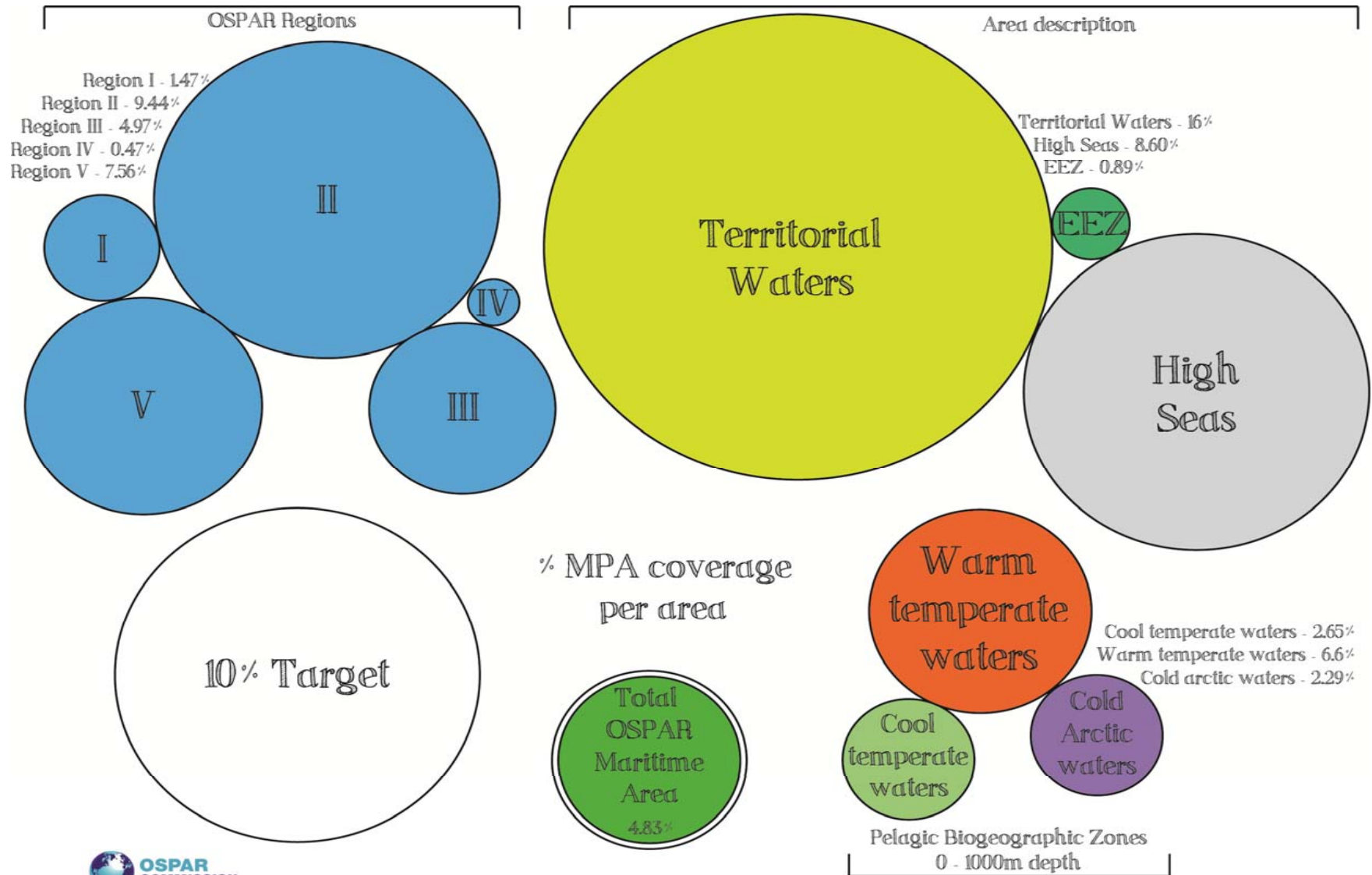


**OSPAR
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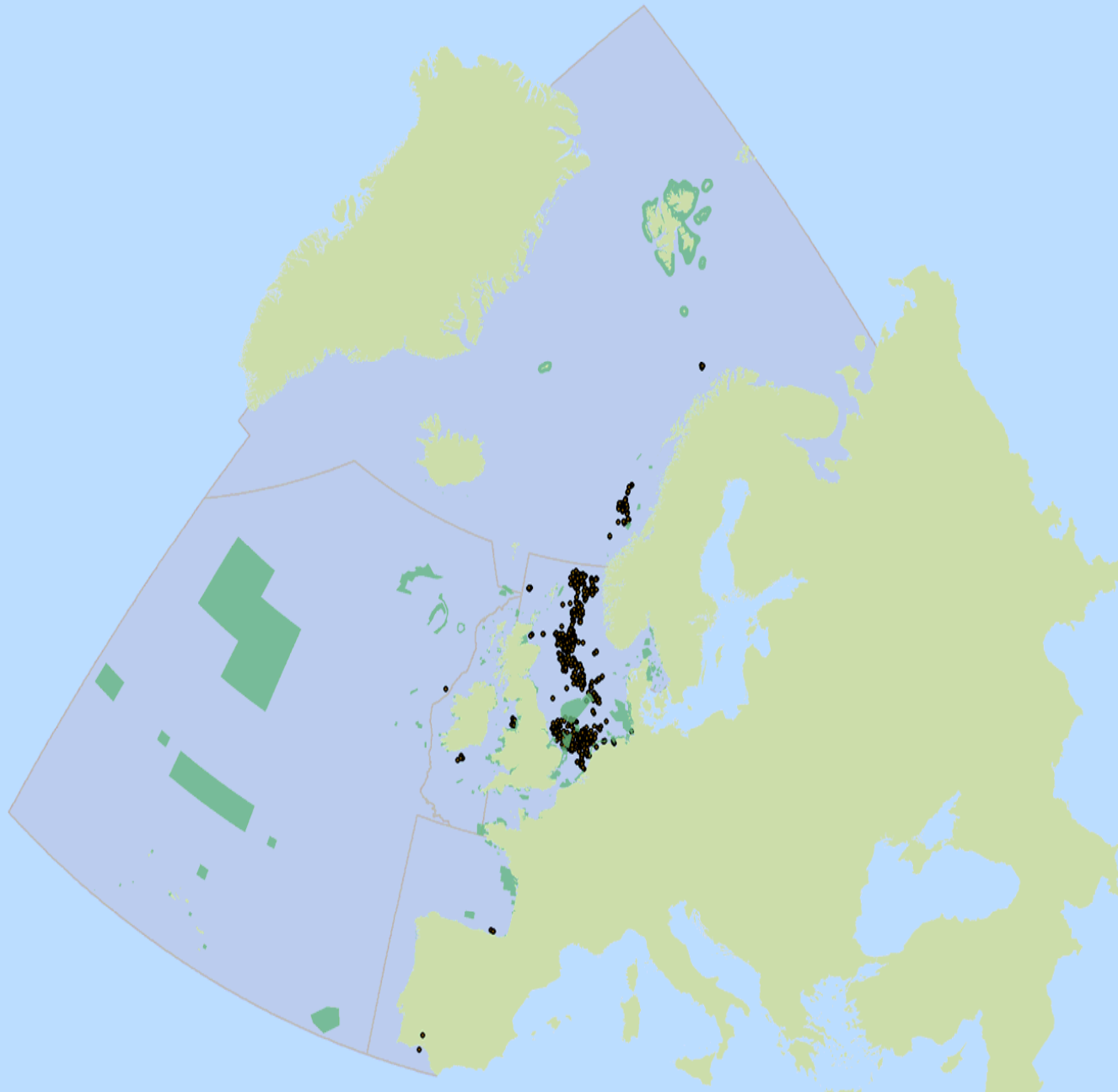
OSPAR Marine Protected Areas

- (A) Charlie-Gibbs North/South MPA
- (B) Milne Seamount Complex MPA
- (C) Altair Seamount High Seas MPA
- (D) Mid-Atlantic Ridge north of the Azores High Seas MPA
- (E) Antialtair Seamount High Seas MPA
- (F) Josephine Seamount High Seas MPA
- Areas within national jurisdiction

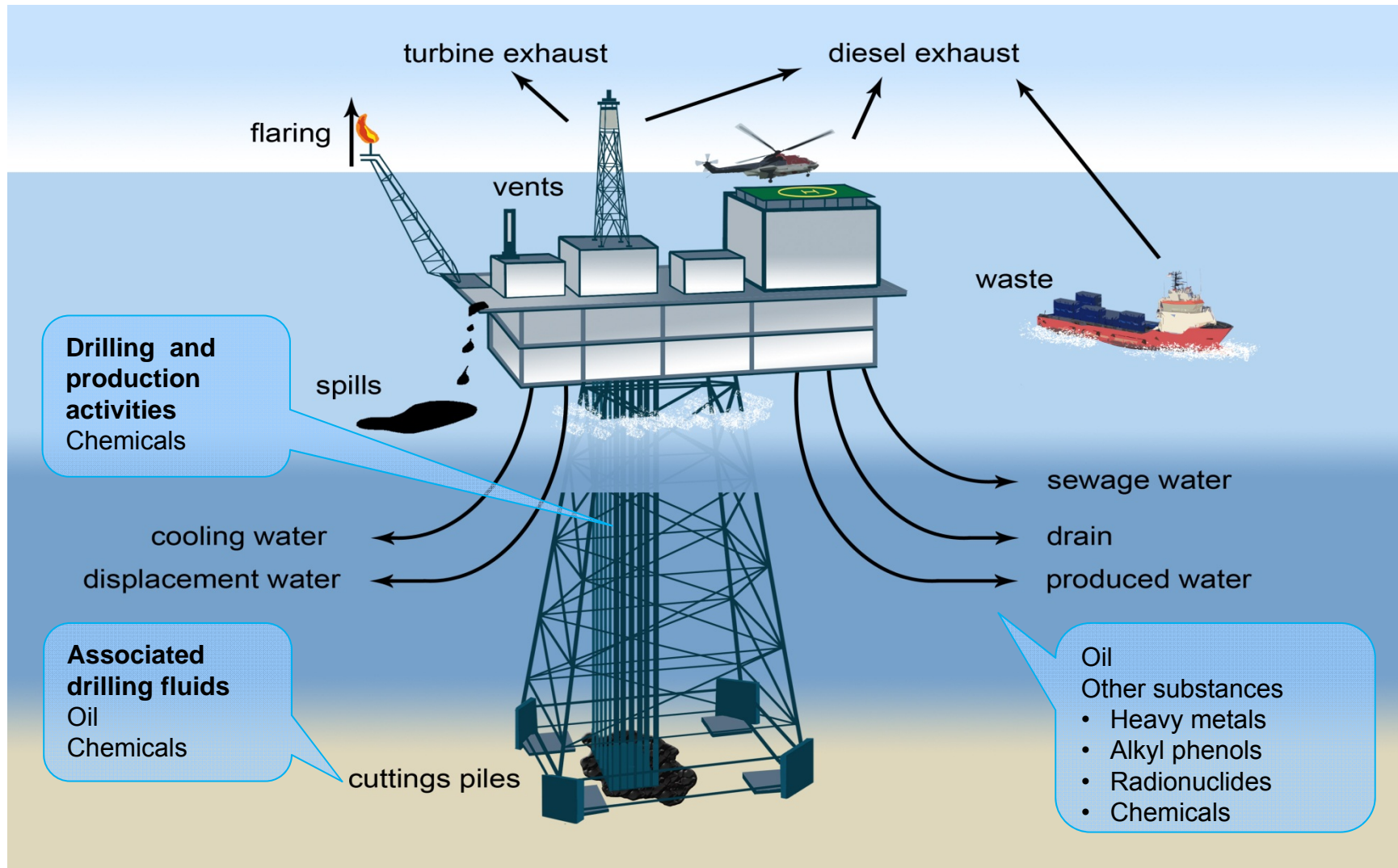




Source: 2012 Interim Status Report on the OSPAR Network of Marine Protected Areas, August 2012



What are the problems?



What has been done?

Discharges of chemicals and oil

Recommendation 2006/5 on a Management Regime for Offshore Cutting Piles

Recommendation 2001/1 for the Management of Produced Water and Recommendation 2012/15 for a Risk-based Approach

Decision 2000/3 on the use of Organic-Phase Drilling Fluids (OPF) and the discharge of OPF contaminated cuttings

Use of chemicals offshore

Decision 2000/2 on a Harmonised Mandatory Control System for the Use and Reduction of the Discharge of Offshore Chemicals

Recommendation 2010/3 on a Harmonised Offshore Chemical Notification Format

Recommendation 2010/4 on a Harmonised Pre-screening Scheme for Offshore Chemicals

Decommissioning

Decision 98/3 on the Disposal of Disused Offshore Installations

Environmental Management

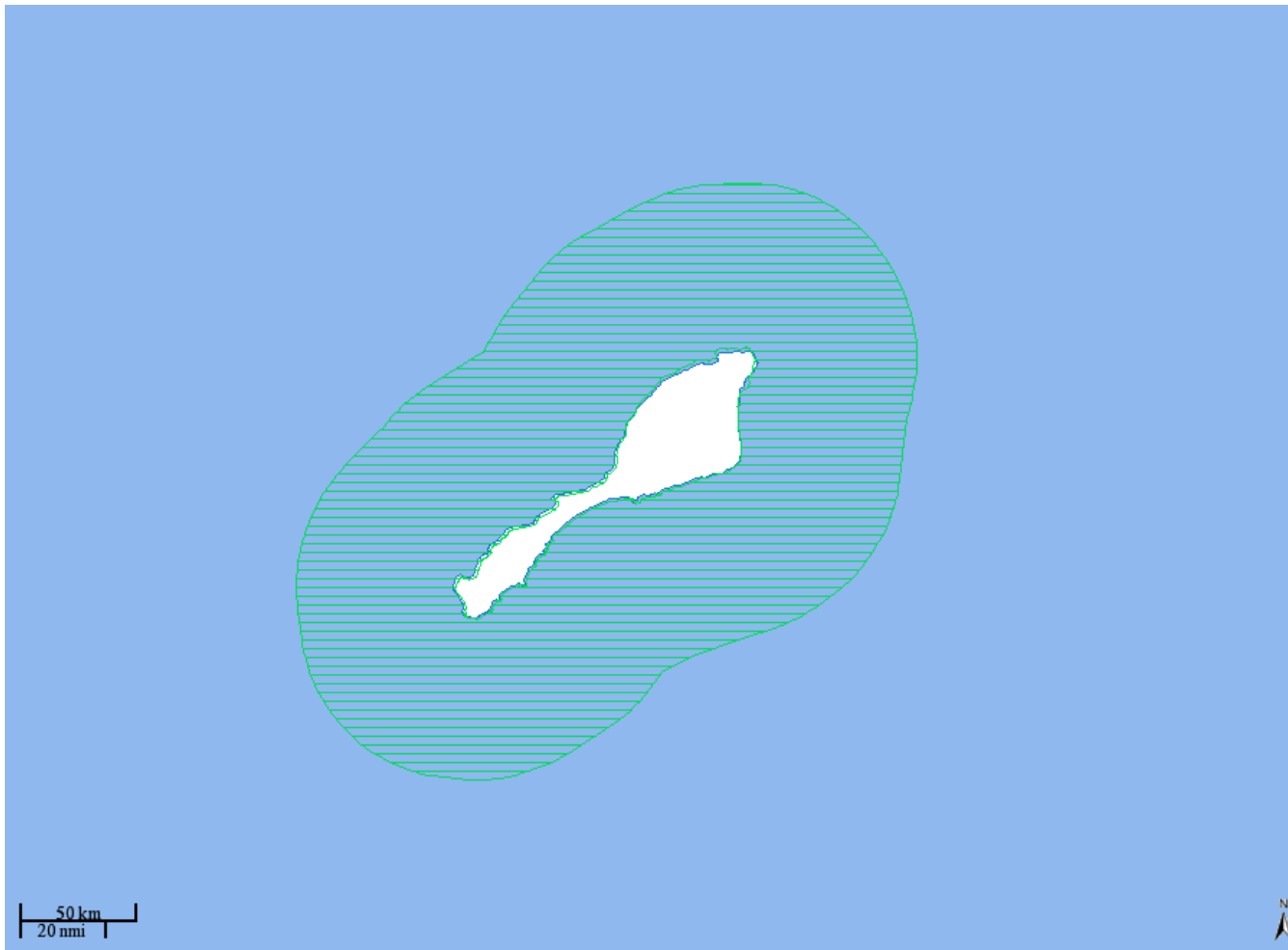
Recommendation 2003/5 on the Promotion of the Use and Implementation of EMS

OSPAR 2003: OSPAR Recommendation on MPAs

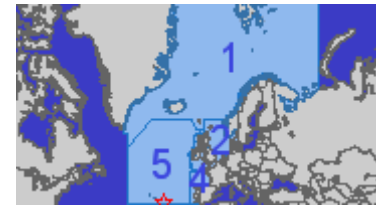
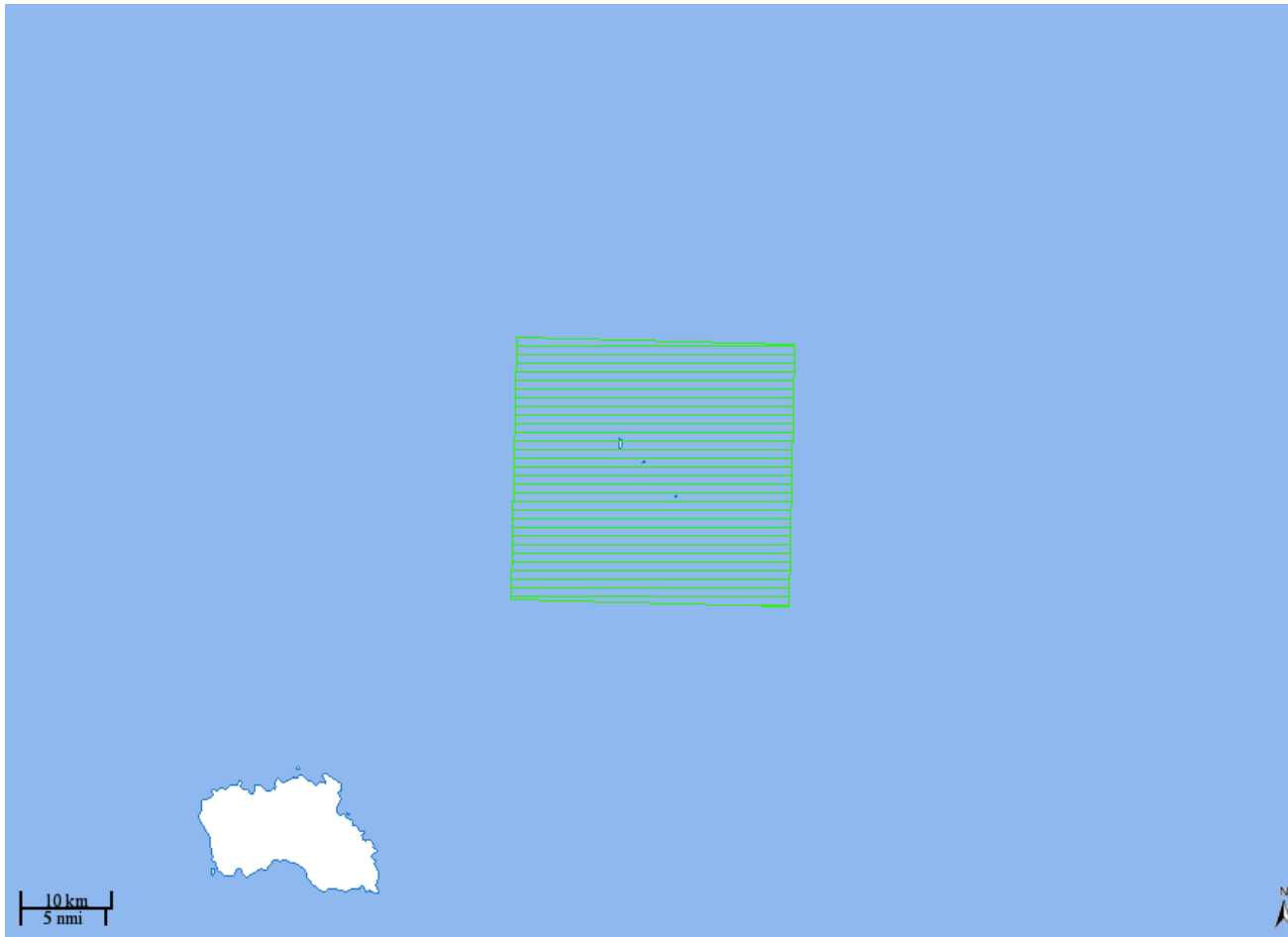
Guidelines for the identification and selection of MPAs in the OSPAR maritime area

Guidelines for the management of MPAs in the OSPAR maritime area

OSPAR: a network of marine protected areas in the North East Atlantic ocean (<http://carto.mpa.ospar.org>)



OSPAR: a network of marine protected areas in the North East Atlantic ocean (<http://carto.mpa.ospar.org>)





- Thank you!
- Questions? Secretariat@ospar.org
- Watch this space: www.ospar.org



Contemporary thinking in Marine Spatial Planning

Hannah Thomas
Marine programme, UNEP-WCMC



Contemporary thinking in Marine Spatial Planning



UNEP



WCMC



Proteus Partners Meeting 2015

Hannah Thomas

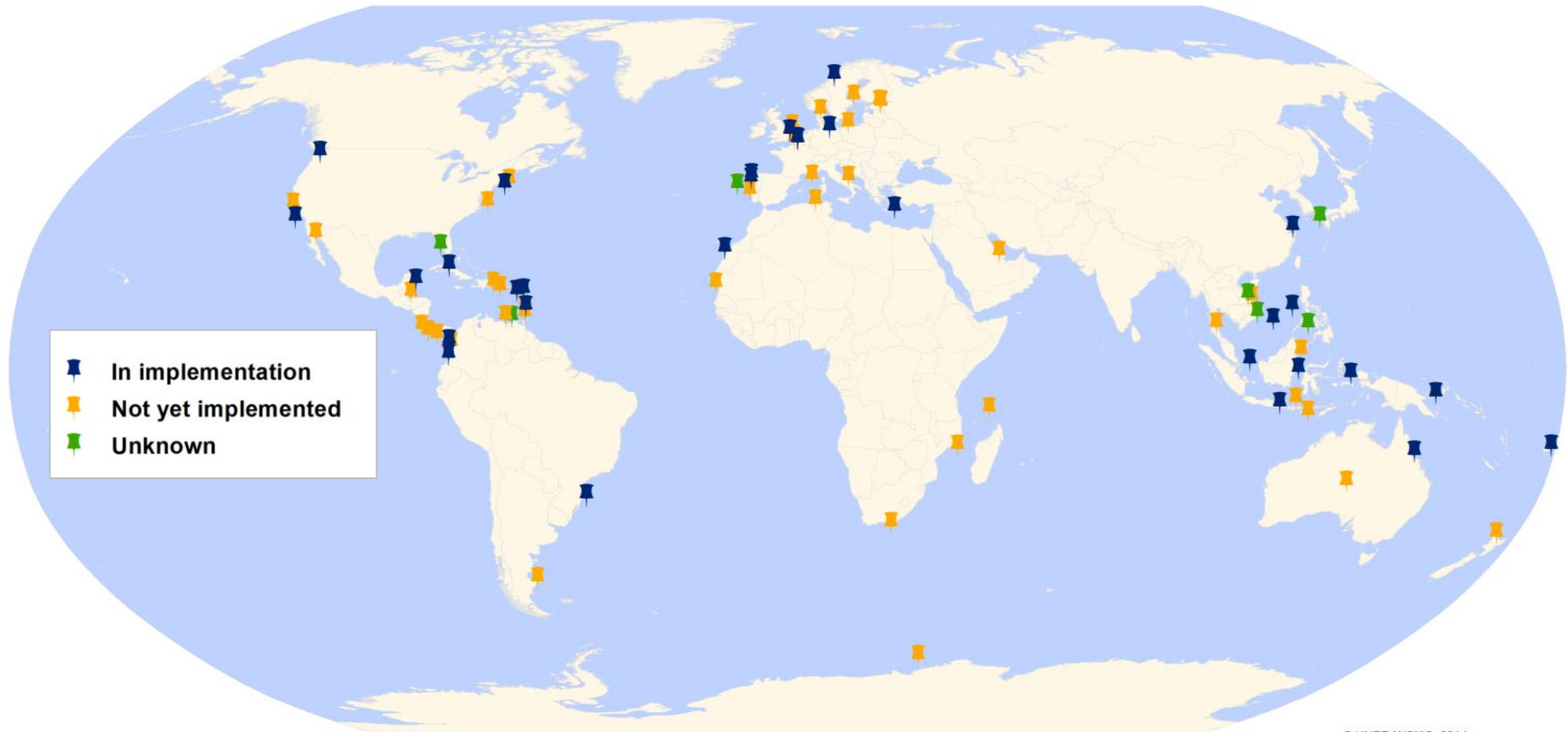
Senior Programme Officer, Marine Programme UNEP-WCMC

Marine or Maritime Spatial Planning (MSP)

An integrated framework for adaptively managing biodiversity and sustainable multi-sector resource use



MSP is becoming more frequently implemented around the world



© UNEP-WCMC, 2014

Global level support for MSP

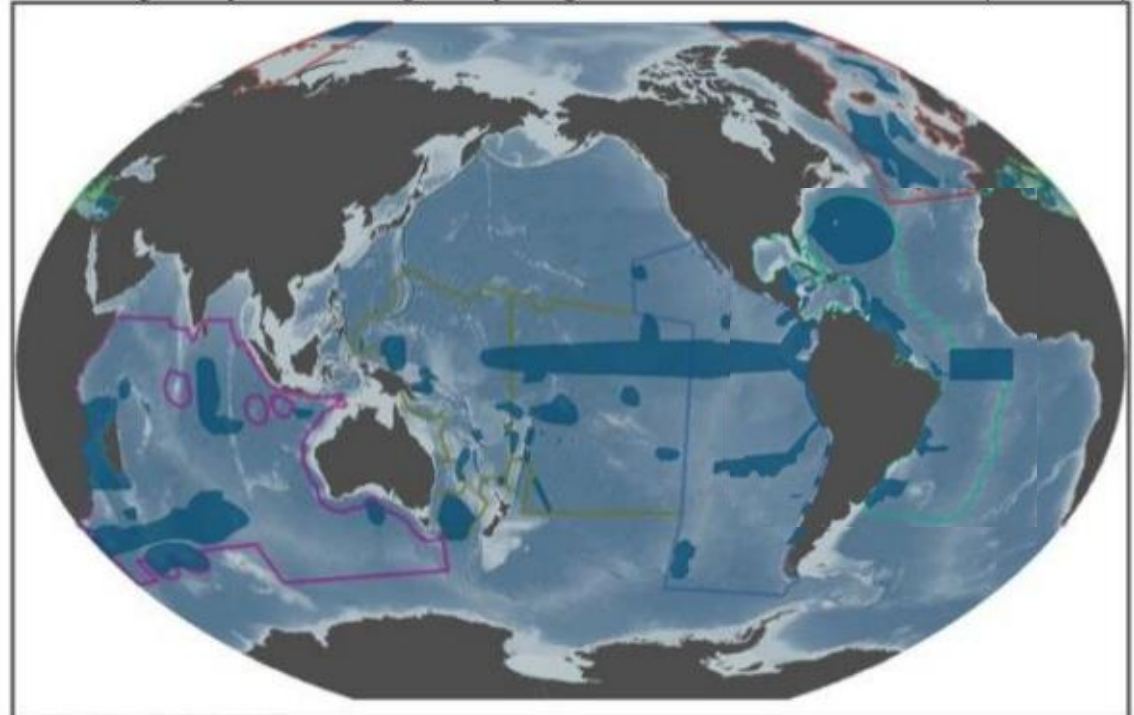
Aichi
biodiversity
Target



...**10% of coastal and marine areas** conserved through effectively and equitably managed, ecologically representative and well-connected **systems of protected areas** and other effective area-based conservation measures, and **integrated into the wider landscape and seascape**



Ecologically or Biologically Significant marine Areas (EBSAs)



Marine Geospatial Ecology Lab, Duke University (2012)

Global level support for MSP

Aichi
biodiversity
Target



...**10% of coastal and marine areas** conserved through effectively and equitably managed, ecologically representative and well-connected **systems of protected areas** and other effective area-based conservation measures, and **integrated into the wider landscape and seascape**

SUSTAINABLE
CEAN
INITIATIVE



CoP 11 (2012) Develop practical guidance and build capacity of countries to use marine spatial planning

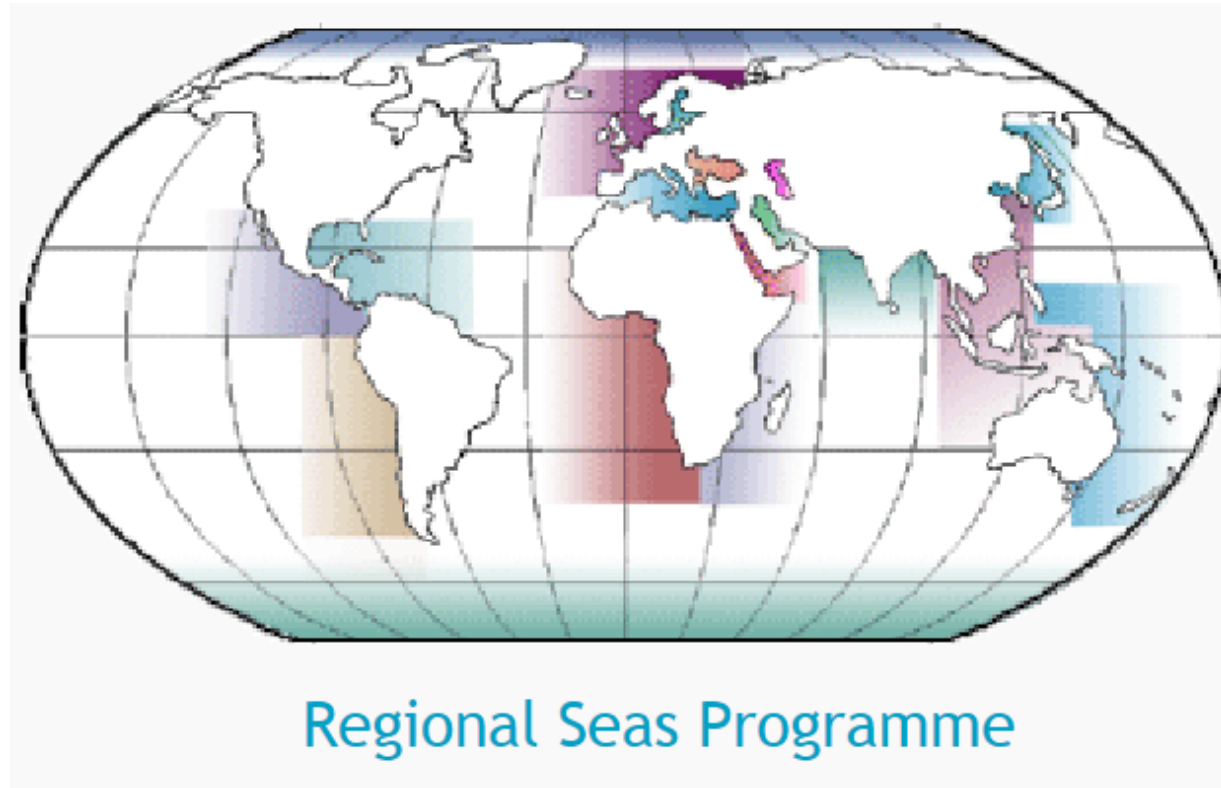
Global level support for MSP

A new paradigm for ocean management:

- Partnerships to ensure all levels of government, non-government organisations, industry and community groups work together
- A fully sustainable ocean, at least 30% of which has no extractive activities
- MPAs are integrated into the broader seascape and landscape through large-scale marine management initiatives



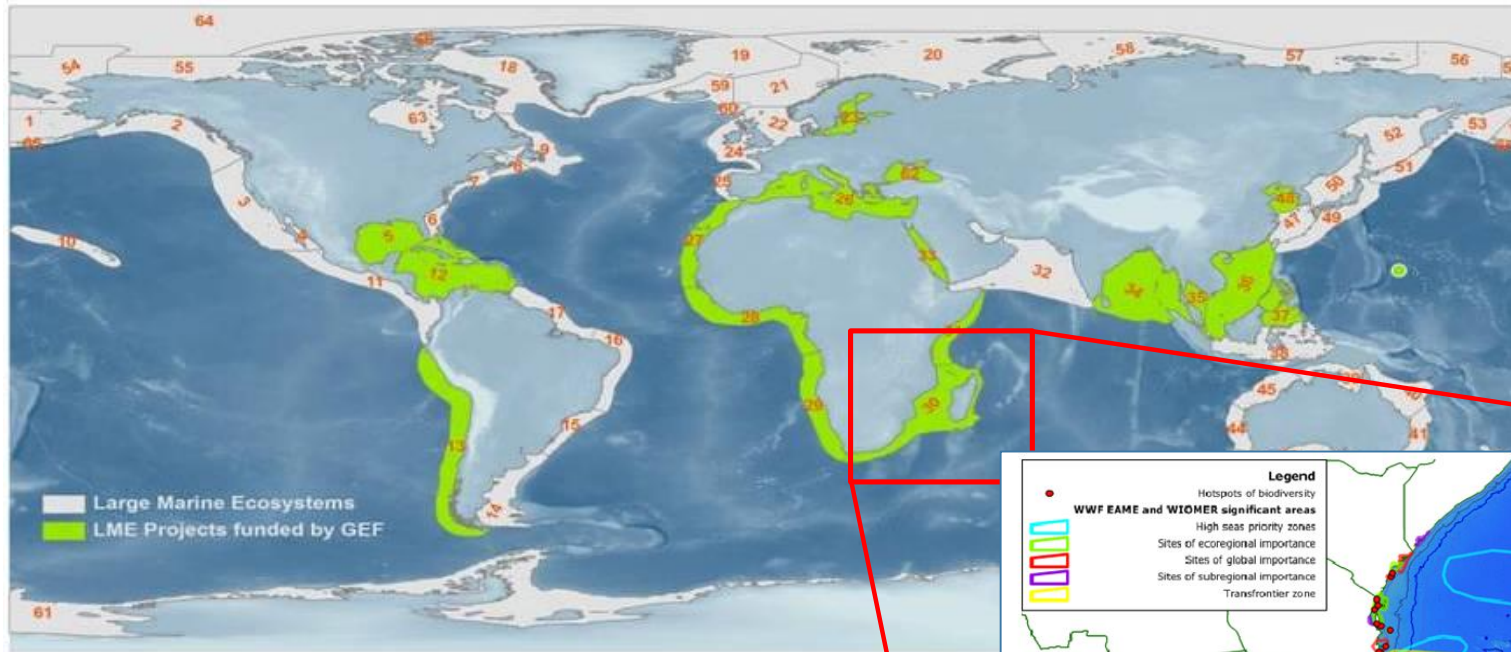
Regional level support for MSP



Regional Seas Strategic Priorities 2013-2016

MSP recommended as a tool for countries to apply ecosystem based management

Regional level support for MSP



GEF funding Large Marine Ecosystem

Agulhas Somali
Current LME project
(ASCLME)

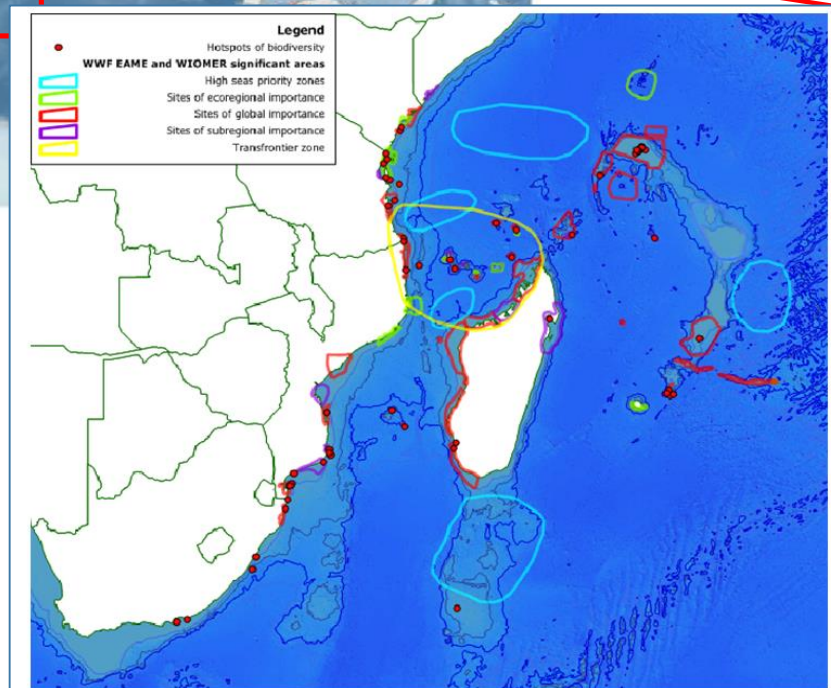
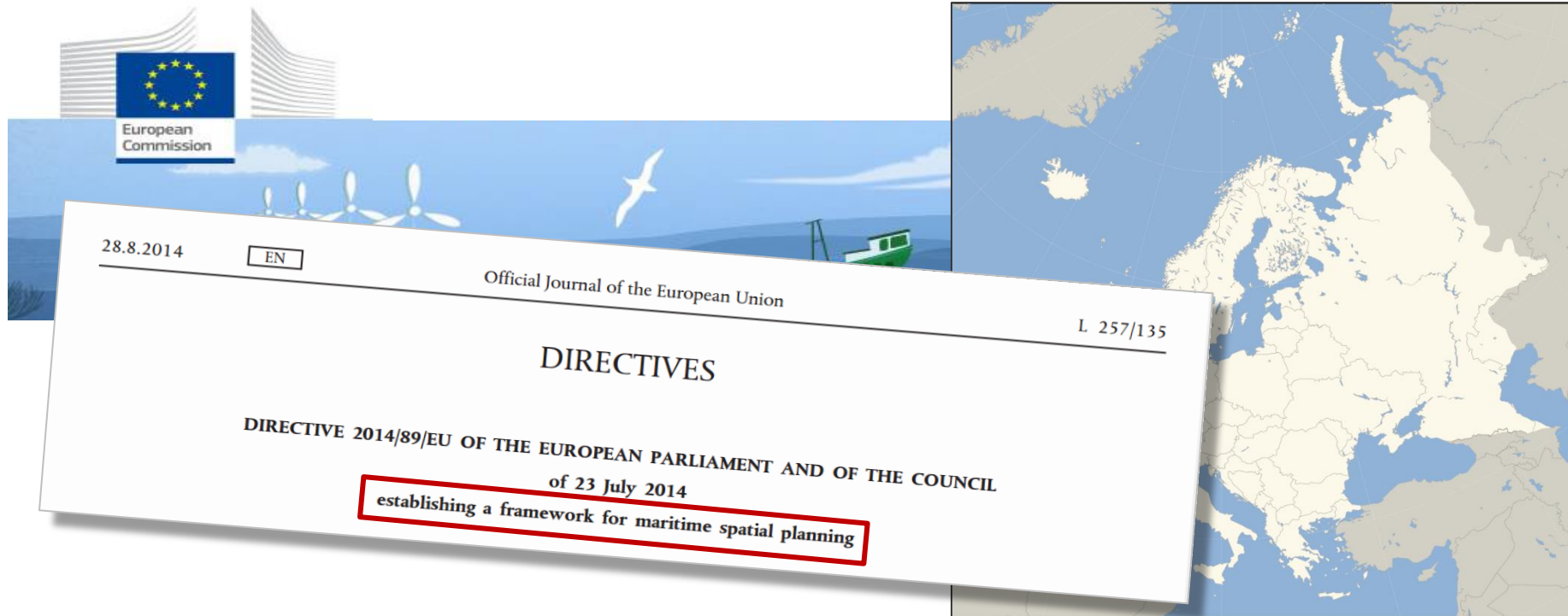


Figure 3: Map of the WIO region showing some of the main areas recently identified to be of particular ecosystem importance.

Regional level support for MSP

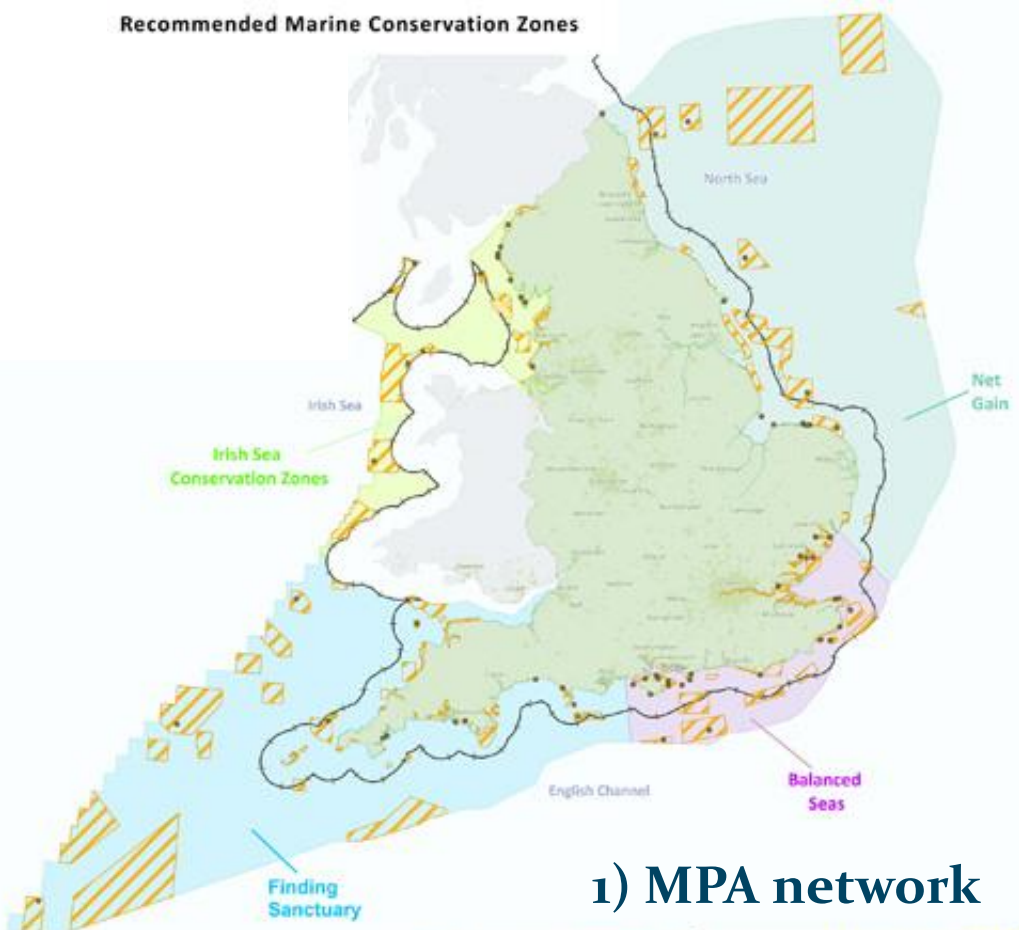


MSP is a key tool for delivering Blue Growth initiatives

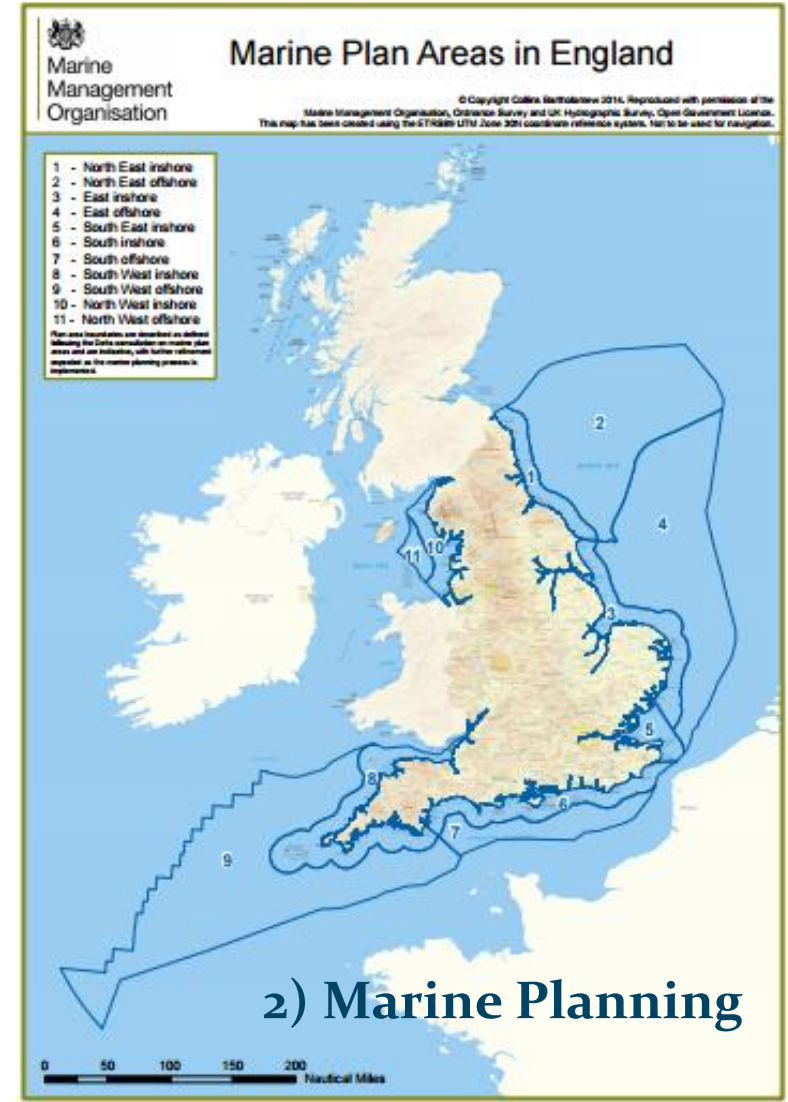
EC Directive establishes minimum common standards

Obligation for Member States to establish MSP by 2021

National approaches to MSP: UK

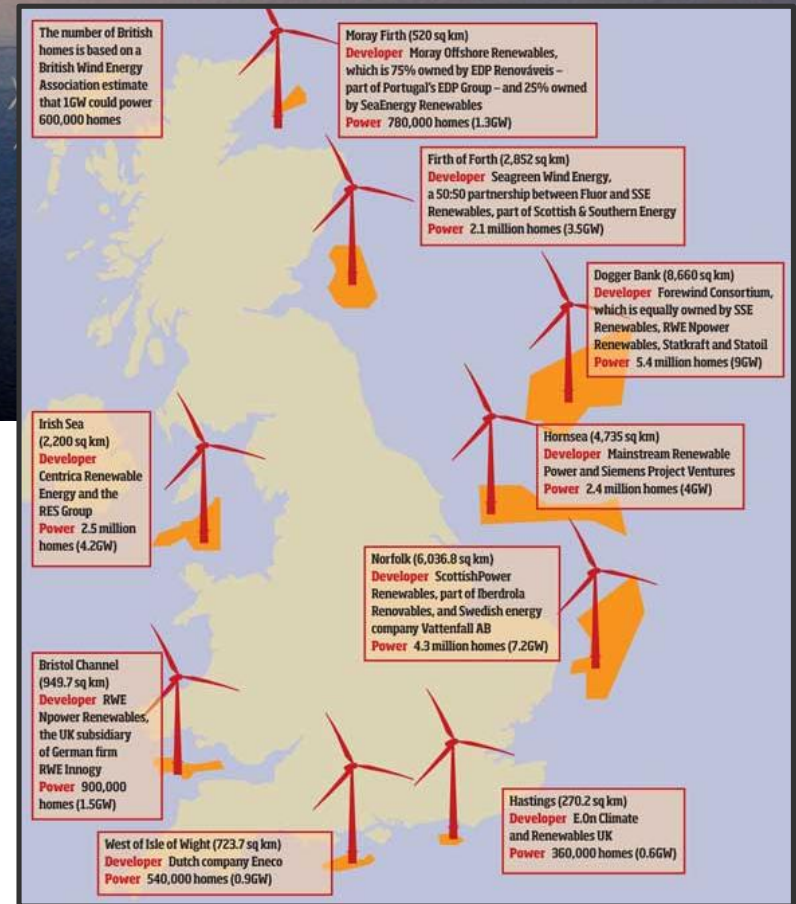
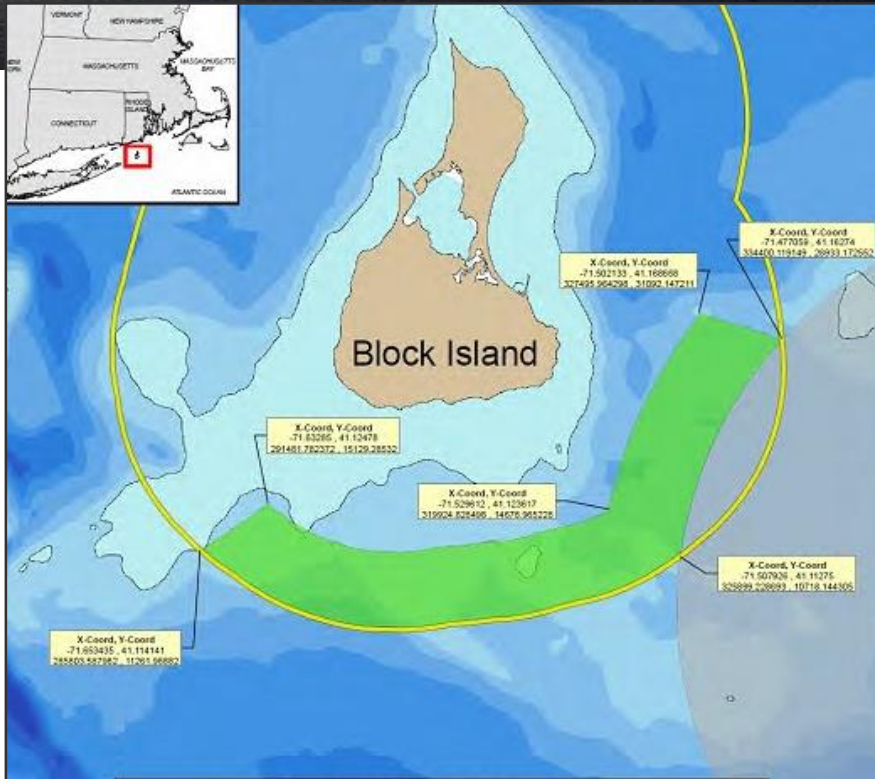


1) MPA network



2) Marine Planning

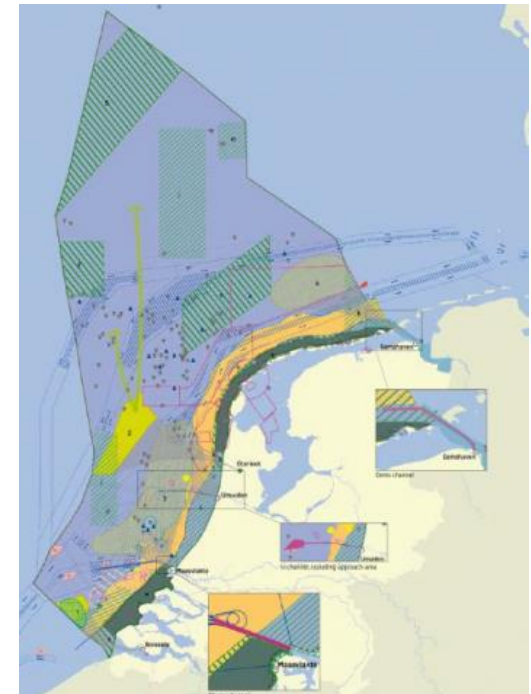
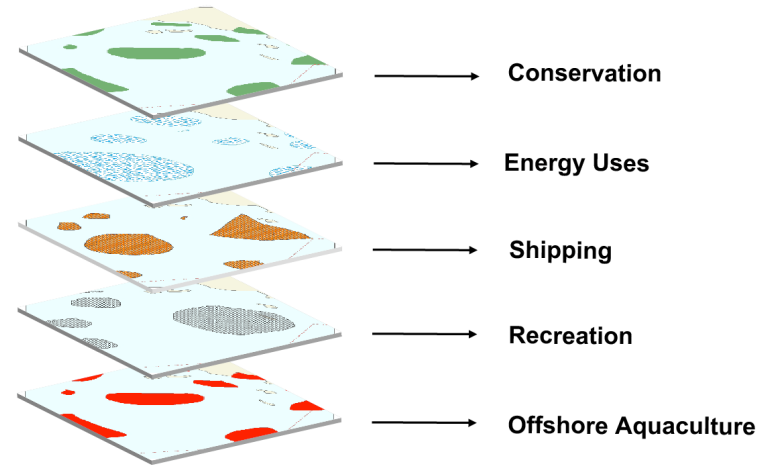
Sectoral support for MSP



MSP facilitates the strategic placement of marine infrastructure

Advantages of MSP

- Ecosystem-based
- Multi-sectoral
- Reduces conflicts
- Reduces planning uncertainty and encourages investment
- Improves coordination and communication
- Economies of scale
- Adaptive



Refining MSP

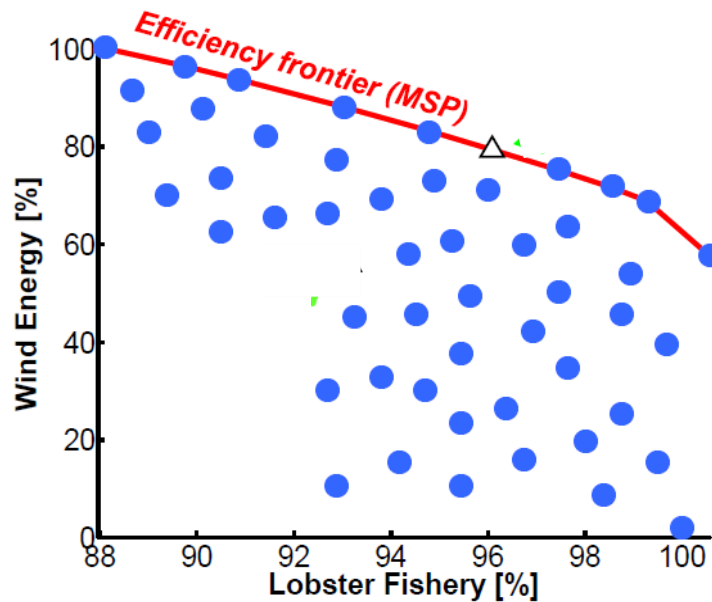
Improved understanding
of the relationship
between marine
infrastructure and
biodiversity



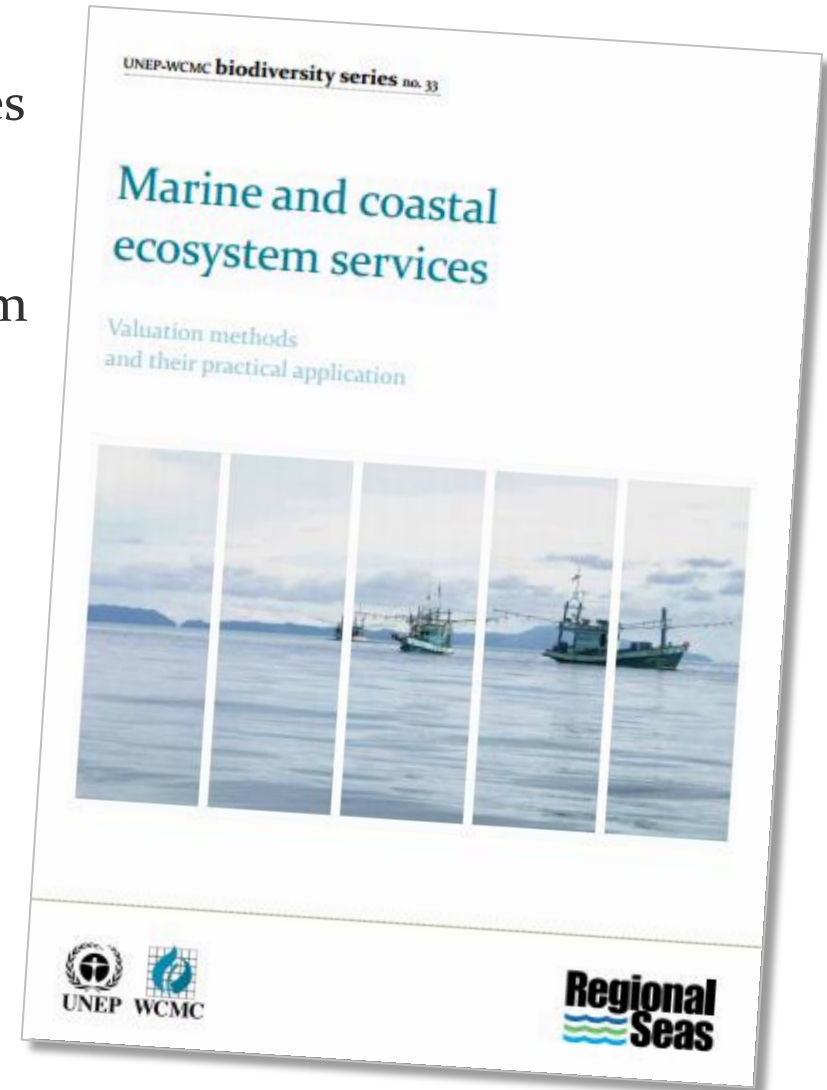
Refining MSP

Better incorporation of ecosystem services

- Understand their value
- Understand the trade-offs between them

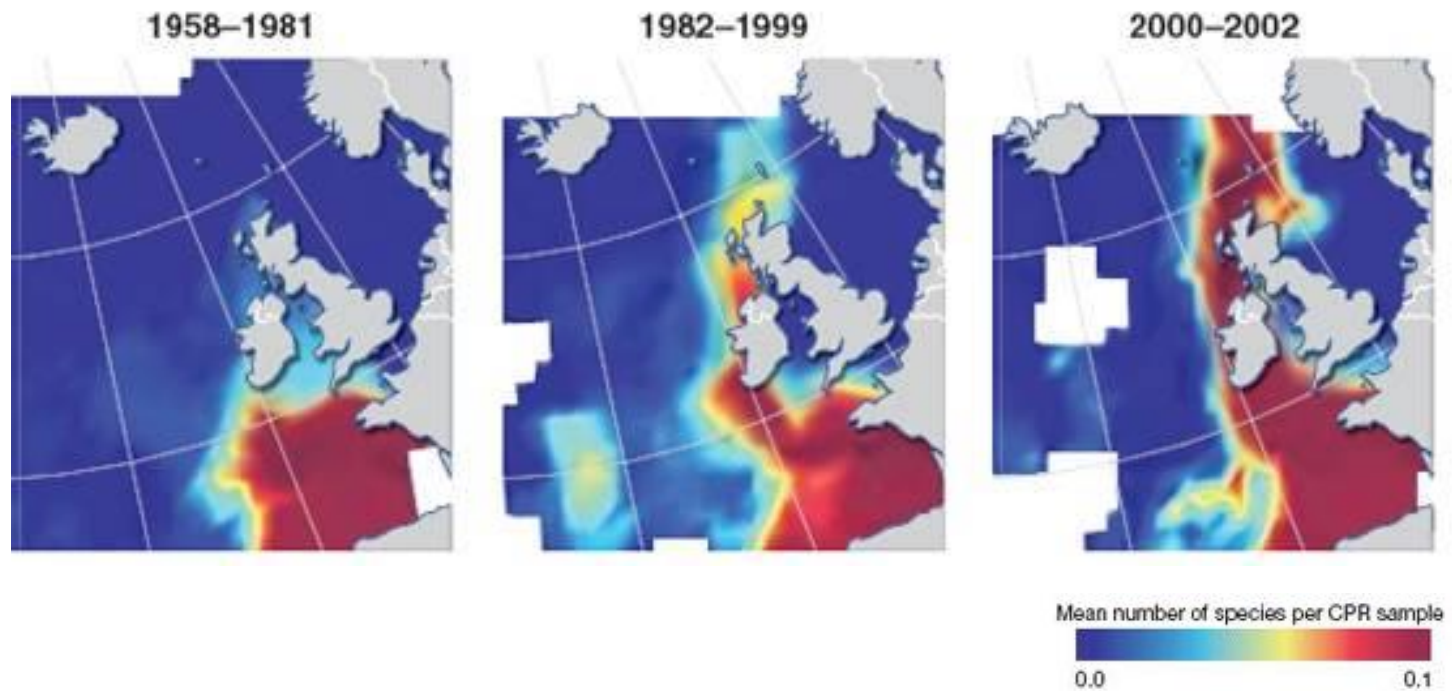


White et al. 2012 PNAS



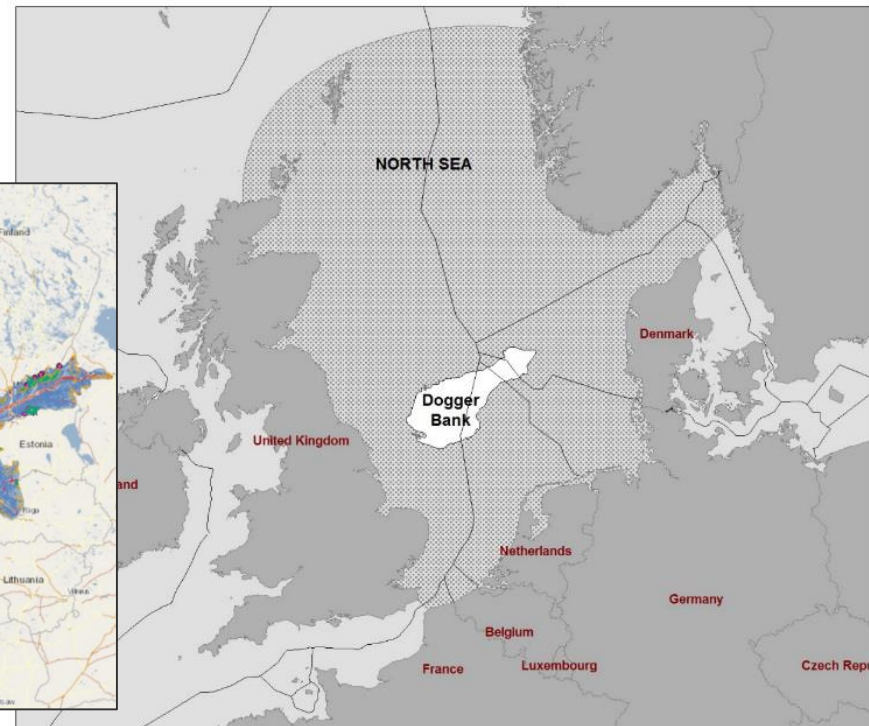
Refining MSP

Incorporating the effects of climate change

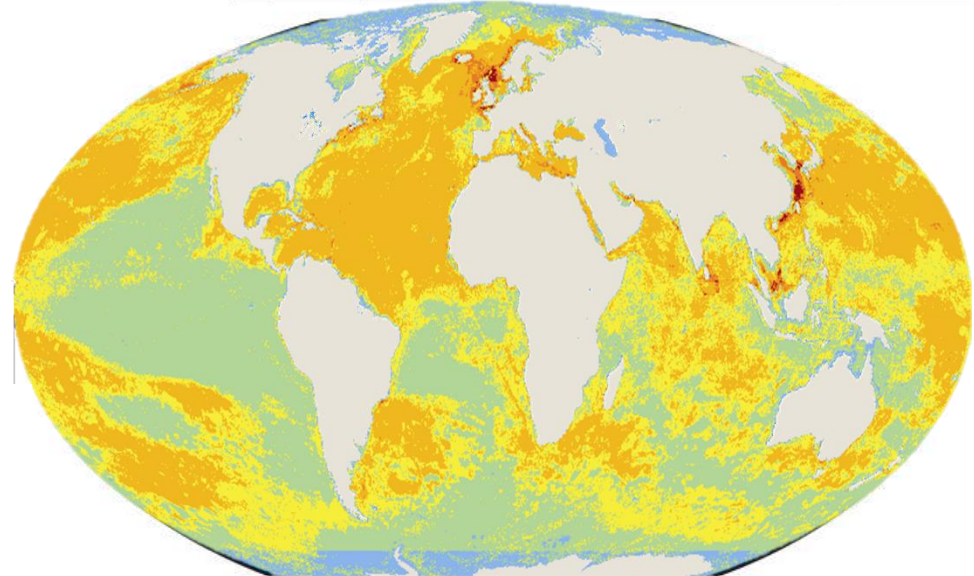


Refining MSP

Transboundary
planning



Areas Beyond National
Jurisdiction



Very Low Impact Low Impact Medium High Impact Very High Impact

Conclusions

Marine Spatial Planning:

- has increasing global, regional and national support as a valuable framework for sustainably managing resources
- can offer a wide range of benefits, such as conflict reduction; participatory decision making; increased planning certainty

To achieve its full potential, we need collectively to further explore:

- Benefits of marine infrastructure and co-location possibilities
- Ecosystem service valuation and trade-offs
- Effects of climate change
- Transboundary and ABNJ challenges



UNEP



WCMC

proteus
partners for a wiser world

Proteus Partners Meeting 2015

Refining MSP

Governance issues

- Establishing supporting legal frameworks
- Ensuring institutional commitments
- Enabling transparent, participatory decision making



Refining MSP

Understanding context specific enabling factors

- Government support
- Strong stakeholder engagement
- Best available data
- Sustainable financing
- Human capacity



Global level support for MSP



GOAL 14

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

SUSTAINABLE DEVELOPMENT GOALS

United Nations Post-2015
Sustainable Development Goals