

# Identifying an Other Effective Area-Based Conservation Measure

North-East Atlantic Fisheries Commission

Dr. Darius Campbell Secretary of NEAFC



#### **NEAFC** Objectives



"to ensure the long-term conservation and optimum utilisation of the fishery resources in its Convention Area, providing sustainable economic, environmental and social benefits"



### **Convention Objectives**



### **Economic and Social importance**



#### **Contracting Parties:**

- Denmark in respect of Faroes and Greenland
- European Union
- Iceland
- Norway
- Russian Federation
- United Kingdom



# The Commission shall in particular:



take due account of the impact of fisheries on other species and marine ecosystems... adopt... conservation and management measures that address the need to minimise harmful impacts...

take due account of the need to conserve marine biological diversity...





#### Balancing environment, society and economics

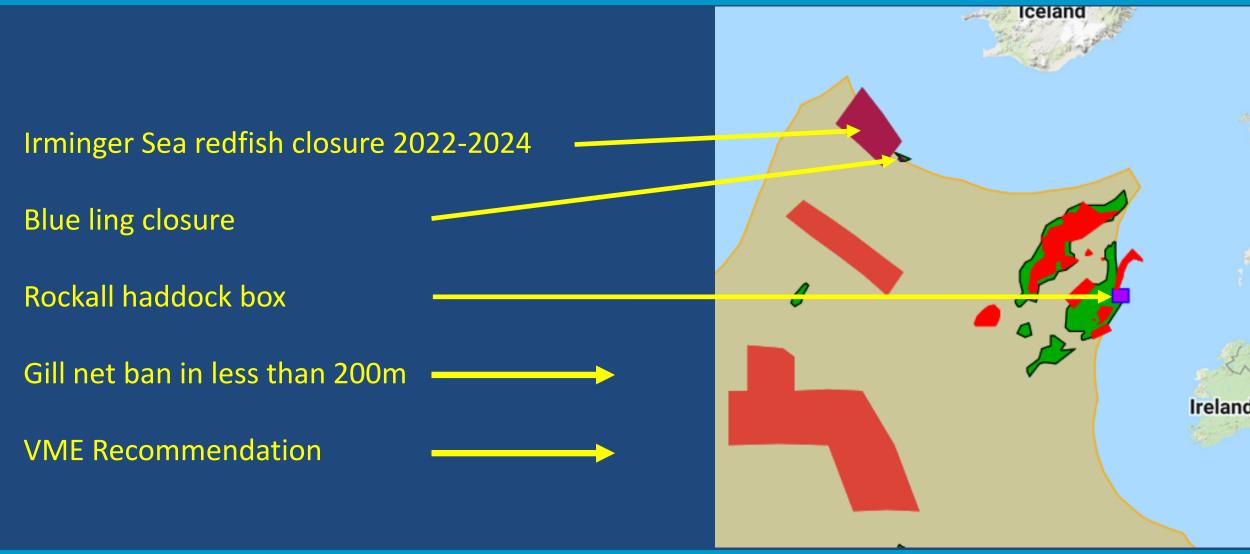


**NEAFC** 



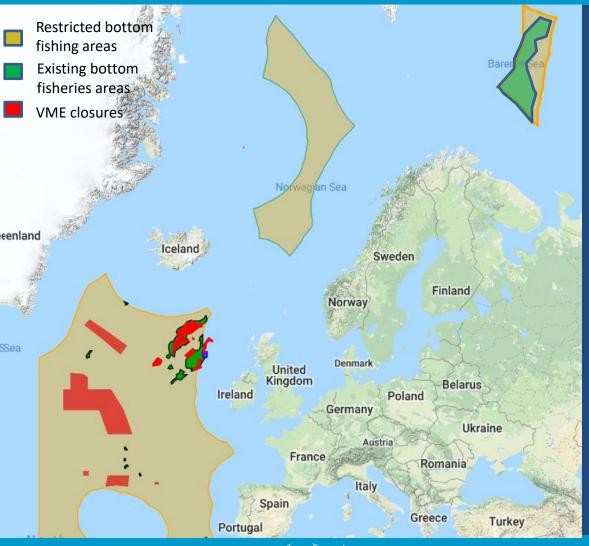
#### Other Effective area-based Conservation Measures (OECMS) OECMS IN THE ICES/IUCN-CEM FEG WORK Recognising and reporting OECM PRACTICES AND STI effective area-based cons measures VOLUME 3 / ISSUE 42 Strategic Plan Biodiversity and the Aich "Living in Harmor JACOPO.PASQUERO®EBCD.ORG OWCHA & CPAWS O NON FEG. North East Atlantic Fisheries Commission **NEAFC**

# Considering area-based measures as OECMs





#### An area-based measure on conservation of Vulnerable Marine Ecosystems



- Continued fishing in existing bottom-fisheries areas – (green -2%)
- VME Bottom fishing closures (red 7%)
- Restricted bottom fishing areas (buff -90%).



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#### Filling in the OECM Template

Previously PECMAS 2023-02-05 Annex¶ Template for Scientific and Other Information to Evaluate NEAFC VME Closed Areas as Potential Other Effective Area-based Conservation Measures (OECMs) Title/Name of the area: Area management measures for the protection of vulnerable marine ecosystems (VMEs) in the NEAFC Regulatory Area - Areas Closed to Bottom Fisheries for the protection of VMEs. NEAFC Ad Hoc Working Group on OECMs and the Permanent Committee on Management and Science Institution(s) in charge of assessing OECMs: 1 Abstract This NEAFC area-based measure, under legally binding Recommendation (19:2014), is a closure of certain areas to all bottom contact fishing gears to prevent significant adverse impacts of fishing on vulnerable marine ecosystems (VMEs) known to occur or likely to occur in the NEAFC Regulatory Area. NEAFC Recommendation (19:2014) also contains another area-based measure known as restricted fishing areas and regulations related to it. This measure is not assessed here. NEAFC considers that the areas closed to bottom fisheries meets the OECM criteria as contained in Decision 14/2018 of the Convention on Biological Diversity (CBD). This OECM designation relates to the areas closed for the protection of VMEs under NEAFC Recommendation 19:2014 under international waters in the NEAFC Regulatory Area. The distribution of the NEAFC areas closed to bottom fishing for the protection of VMEs is reported in Figure 1 (red areas in the map below). These areas of closures also overlap with Marine Protected Areas (MPAs) designated under the OSPAR Commission. The OSPAR MPAs are binding on all NEAFC Contracting Parties except the Russian Federation by means of their contracting party status in OSPAR. The Russian Federation is not a Contracting Party of OSPAR. The OECM criteria do not allow OECM to be designated in the same spatial (2 dimensional) area as MPAs, see Figure 2 for overlaps between the OSPAR and NEAFC measures. Figure 3 shows those areas closed to bottom fishing for the protection of VMEs that lie outside the OSPAR MPAs and can hence be recognised as OECMs. It should be noted however, that the OSPAR MPAs do not confer protection via fisheries measures, but the underlying NEAFC measures to protect VMEs nevertheless provide protection within the MPAs. This interaction between OSPAR and NEAFC measures is described in a separate narrative [see x]. The narrative can also cover other issues arising from the three-dimensional nature of the sea versus the terrestrial more two dimensional approach that seems to lie behind the CBD OECM criteria and the reporting system. ¶ RM (Standard)

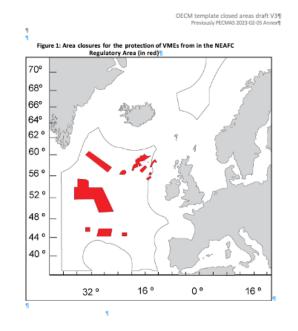


Figure 3: NEAFC areas closed for the protection of VMEs not overlapping with OSPAR

Figure 2: NEAFC areas closed for the protection of VMEs showing overlap with OSPAR

OECM template closed areas draft V3¶ Previously PECMAS 2023-02-05 Annex®

Geomorphological features of the northeast Atlantic include the major ocean basins with their vast abyssal plains, the Mid-Atlantic Ridge (MAR), and the generally wide continental shelves of the Eurasian continent and Greenland (Figure 4). The continental shelves are mostly within Exclusive Economic Zones (EEZs). The subareas beyond national jurisdiction comprise 3 000-4 000 m deep basins and portions of the MAR in the north Atlantic proper and in the Norwegian-Greenland Seas. Other major features of the MAR are the ridge-associated seamount complexes and islands (Azores,

OECM template closed areas draft V3¶ Previously PECMAS 2023-02-05 Annex<sup>4</sup> Identify pressures and threats on biodiversity (Inventory of known or reasonably foreseeable pressures and threats on biodiversity features, their nature, scale and source, and the range of societal and ecological values attached to the components.) ICES prepares an Ecosystem Overview for the Oceanic Northeast Atlantic ecoregion (see figure

RM (Standard)

OECM template closed areas draft V3¶ Previously PECMAS 2023-02-05 Annex®

Previously PECMAS 2023-02-05 Annex¶

ICES Ecosystem Overview, Oceanic Northeast Atlantic ecoregion (12 December 2019) quote below:

RM (Standard)

The Oceanic Northeast Atlantic ecosystem currently and historically has fewer human activities than other

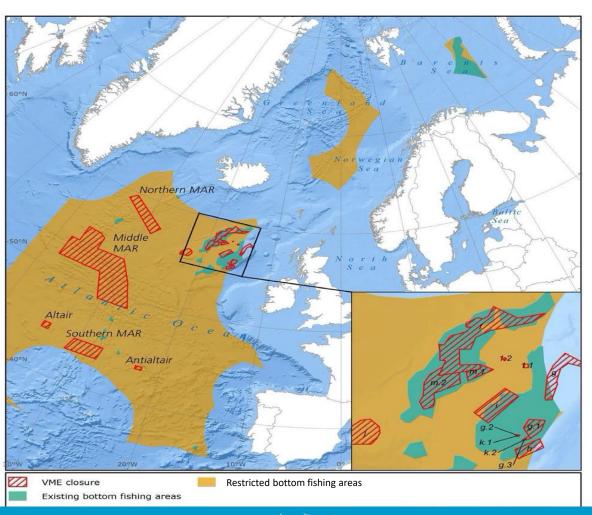


North East Atlantic Fisheries Commission

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# Recommendation 19:2014 on area management measures for the protection of vulnerable marine ecosystems in the NEAFC Regulatory Area



- Continued fishing in (green) existing bottom-fisheries areas
- VME Bottom fishing closures (red)
- Restricted bottom fishing areas (buff)
- Annex 5: indicator species and physical elements
- Protocol for exploratory fishing.





#### Annual advice and 5-yearly Renewals - ICES

#### New information regarding vulnerable habitats in NEAFC Regulatory Area.



- ICES advises to <u>maintain the existing closed</u> areas to protect VMEs. No additions to, or extensions of, the existing closed areas to protect VMEs are advised at this time.
- ICES notes that bottom-fishing activity was observed in a VME closure area on 2020 and occurred outside of the existing NEAFC bottom-fishing areas on Hatto NEAFC Regulatory Area 3 in the Barents Sea. (based on current analytical meth
- ICES advises that <u>any bottom-contact fishing</u> on VME habitats using static or m contacting gears <u>will result in damage to these habitats and poses a risk of sign</u> <u>impacts</u> (as described by FAO [2009]). The inclusion of gear code in the daily ca would greatly improve the VMS data and understanding of potential adverse in bottom-fishing activity on VMEs.

Hatton Bank Closures

| Company | Co

 Minor infringements occurred in and near the Hatton Bank closures



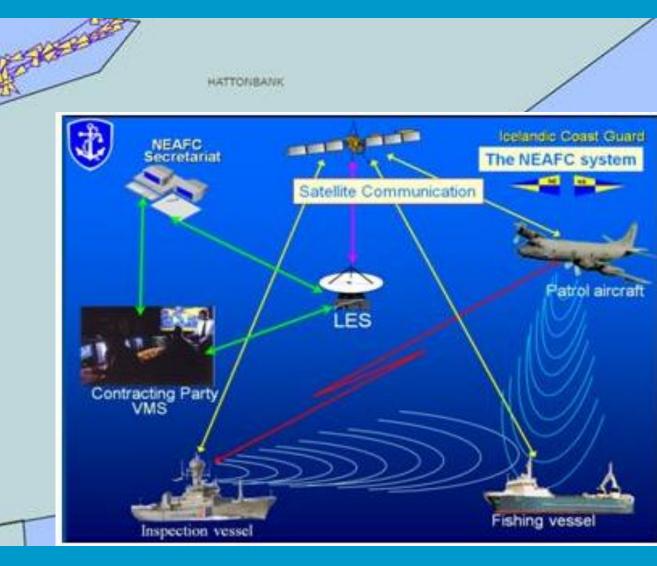


Science t

# Management and Monitoring of Pressure

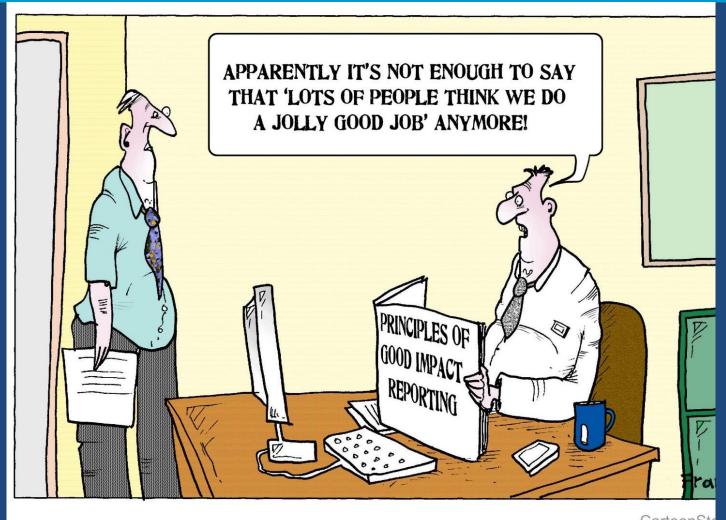


- Electronic Log books and reporting
- Automated catch reporting
- Joint surveillance
- Inspection at Sea and Ports
- Control of non-Contracting Parties





### Monitoring of Biodiversity/Impacts





#### ICES advice on benefits of measures

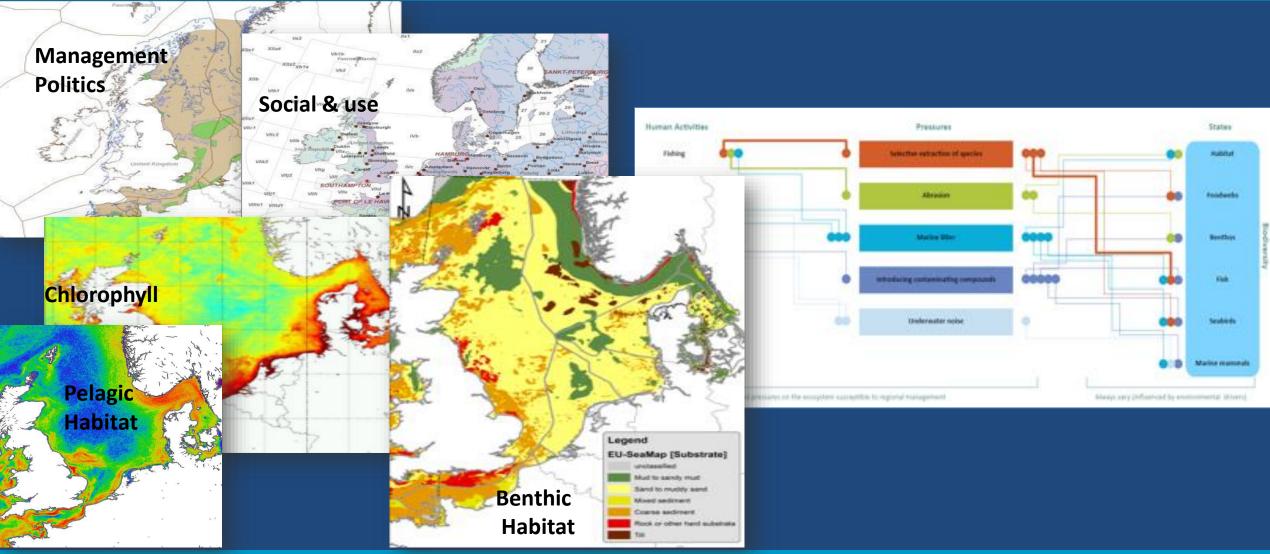
Biological Attribute Present										
Biological Attribute Likely Present based on Expert Opinion										
Specific Location Name Following NEAFC (Location Code)	Biodiversity Attribute									
	1	2	3	4	5	6				
	_	_		•						
Mid Atlantic VME Closures (1)	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>✓</b>				
Middle MAR Area (Charlie-Gibbs Fracture Zone and sub-	<b>~</b>	<b>~</b>		<b>~</b>	<b>/</b>					
Polar Frontal Region) (1a)										
Southern MAR Area (1b)	<b>~</b>	<b>~</b>			<b>/</b>	<b>~</b>				
Northern MAR Area (1c)	<u>~</u>	<b>✓</b>			<b>~</b>	<u>~</u>				
Antialtair Seamount (1d)	<b>✓</b>	<b>~</b>			<b>✓</b>	<b>✓</b>				
Altair Seamount (1e)	<b>✓</b>	<b>~</b>		<b>✓</b>	<b>✓</b>	<b>~</b>				
Rockall Haddock box (2)	<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>				
Hatton Rockall VME Closures (3)	<b>~</b>	~	<b>~</b>	~	<b>✓</b>	<b>✓</b>				
Hatton Bank 2, Area 2 (3a)	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>~</b>				
Hatton Bank 2, Area 1 (3b)	<b>~</b>	<b>~</b>		<b>✓</b>	<b>~</b>	<b>✓</b>				
Hatton–Rockall Basin, Area 1 (3c)	~	<b>✓</b>		<u>~</u>	~	<u>~</u>				
Hatton–Rockall Basin, Area 2 (3d)	~	<b>~</b>		<b>✓</b>	~	<b>~</b>				
Southwest Rockall Bank 2 (3e)	<b>~</b>	<b>~</b>		<b>~</b>	<b>✓</b>	<b>✓</b>				
Southwest Rockall Bank 1 (3f)	<u>~</u>	<b>✓</b>		<b>✓</b>	<u>~</u>	<b>~</b>				
Edora's Bank (3g)	~	<b>~</b>		<b>✓</b>	~	<u>~</u>				
West Rockall Mounds (3h)	~	~		<b>~</b>	<b>~</b>	<b>~</b>				
Logachev Mounds (3i)	<b>~</b>	~		<b>~</b>	<b>~</b>	<b>~</b>				
Rockall Bank; South-West Rockall (Empress of Britain Bank),	<b>~</b>	~		<b>~</b>	<b>~</b>	<b>~</b>				
Area 3 (3j)										
Rockall Bank; South-West Rockall (Empress of Britain Bank)	<b>✓</b>	~		<b>✓</b>	<b>✓</b>	<b>~</b>				
Area 2 (3k)										
Rockall Bank; South-West Rockall (Empress of Britain Bank)	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>~</b>				
Area 1 (3I)										
Rockall Bank; North West Rockall (3m)	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>✓</b>				
Hatton Bank (3n)	<b>~</b>	<b>~</b>		<b>~</b>	<b>✓</b>	<b>✓</b>				
Irminger Sea Redfish Closure (4)		<b>~</b>	<b>&gt;</b>		<b>✓</b>	<b>~</b>				

# How long is a long-term benefit?



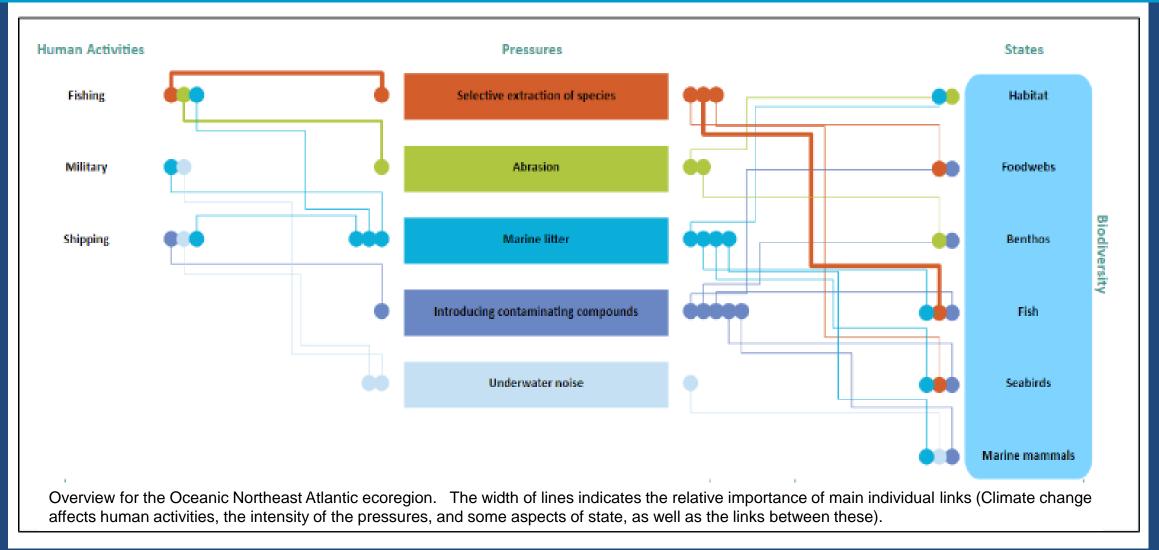


#### ICES Ecosystem overviews- Oceanic North East Atlantic



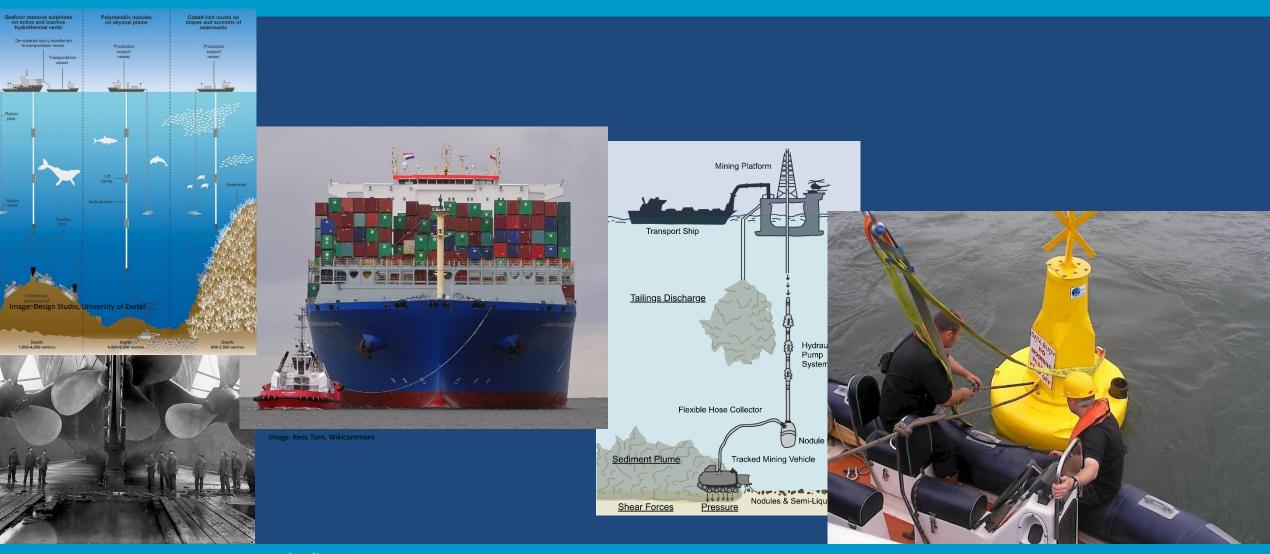


#### ICES Ecosystem overviews – pressures and threats





#### IMO, ISA and OSPAR



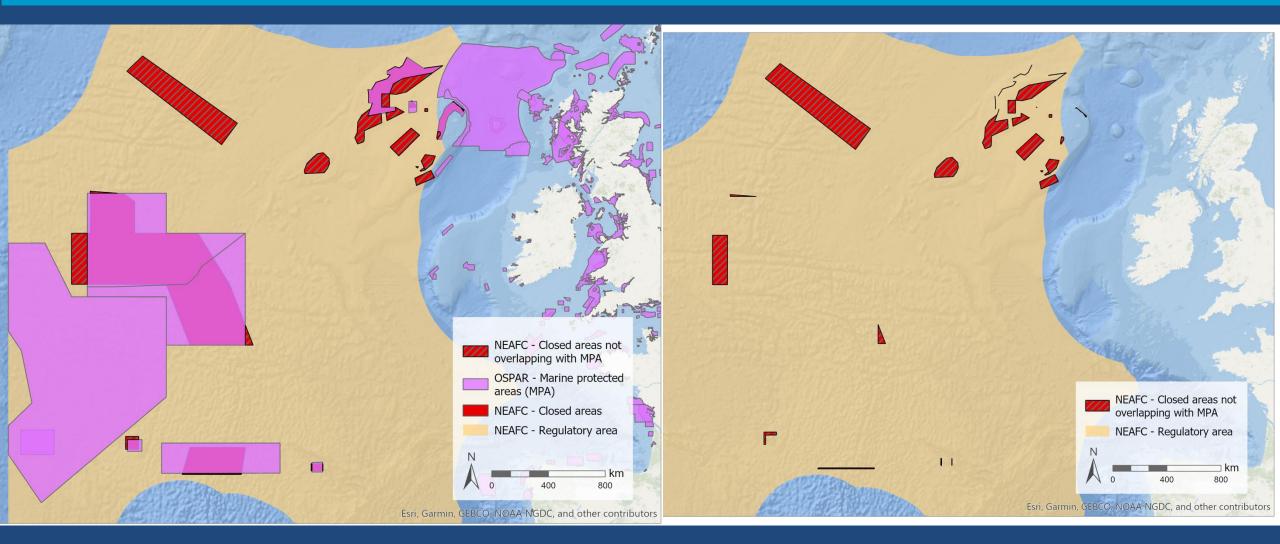




#### Dynamic cooperation in management of the oceans

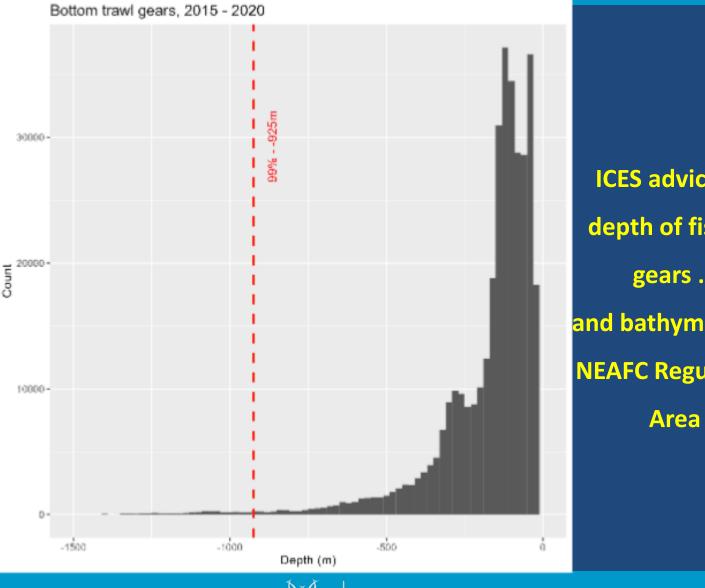


## Overlap of measures, sectors and information

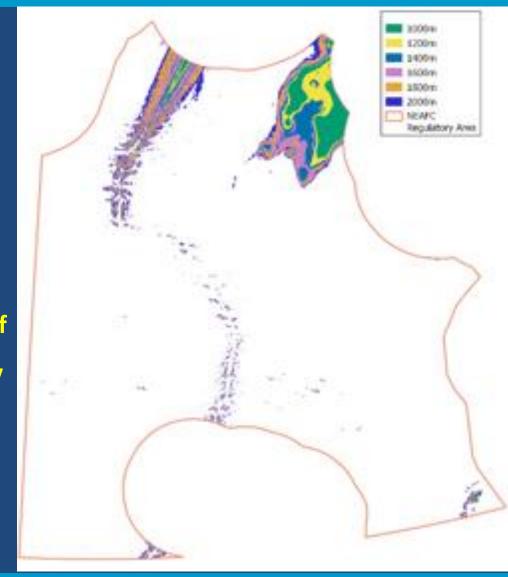




#### Not overstating benefits of restricted bottom fishing areas



**ICES** advice on depth of fishing gears ... and bathymetry of **NEAFC Regulatory** 





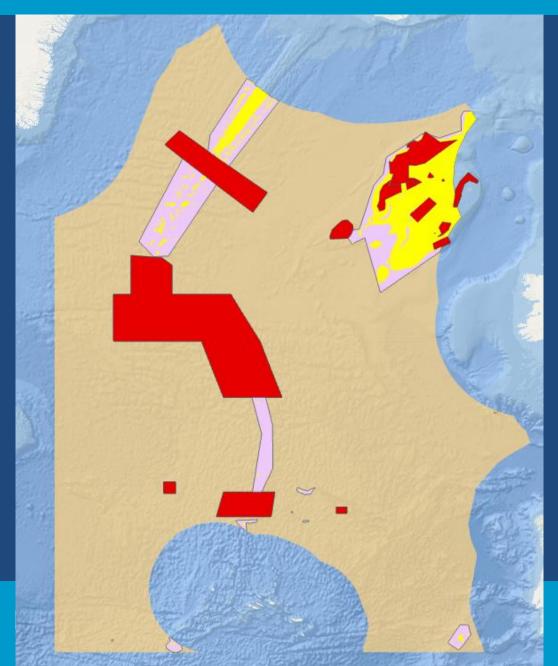


#### Not overstating benefits of restricted bottom fishing areas

Potential OECM identification based on restricted bottom fishing areas at a depth shallower than 1400m

Yellow: Areas shallower than 1400m (max fishing depth)

**Lilac: Potential Restricted Area OECM** outlines





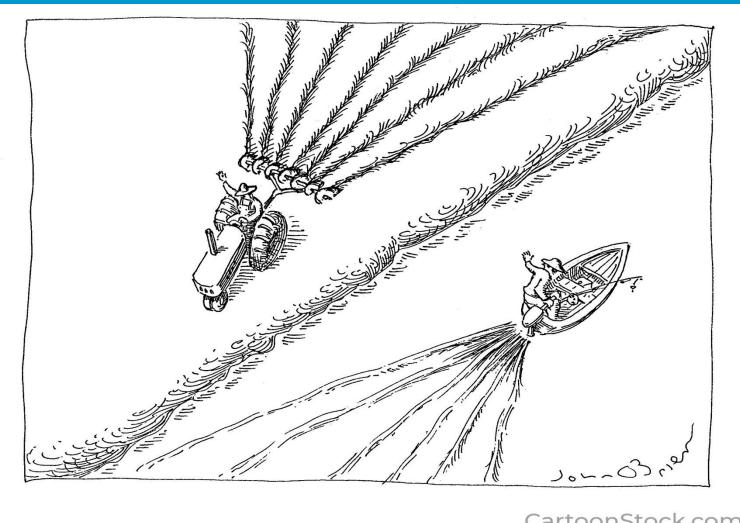


#### Ask ICES - biodiversity attributes for just the <1400m areas?

Biological Attribute Present								
Biological Attribute Likely Present based on Expert Opinion								
Specific Location Name Following NEAFC (Location Code)	Biodiversity Attribute							
	1	2	3	4	5	6		
Mid Atlantic VME Closures (1)		<b>~</b>			<b>\</b>			
Middle MAR Area (Charlie-Gibbs Fracture Zone and sub- Polar Frontal Region) (1a)	<u> </u>	<u> </u>		<u> </u>	<u>\</u>	<b>✓</b>		
Southern MAR Area (1b)	<b>~</b>	<b>~</b>			<b>/</b>	<b>~</b>		
Northern MAR Area (1c)	<u>~</u>	<u>~</u>			<u> </u>	<u> </u>		
Antialtair Seamount (1d)	<b>~</b>	<b>~</b>			<b>~</b>	<b>~</b>		
Altair Seamount (1e)	<u>~</u>	<b>✓</b>		~	<b>~</b>	<b>~</b>		
Rockall Haddock box (2)	<u> </u>	~		~	<b>✓</b>	<b>~</b>		
Hatton Rockall VME Closures (3)	<u>~</u>	<b>~</b>	<b>~</b>	<b>~</b>	<u> </u>	<b>~</b>		
Hatton Bank 2, Area 2 (3a)	<u>~</u>	<b>~</b>		<b>~</b>	<b>~</b>	<b>~</b>		
Hatton Bank 2, Area 1 (3b)	<u>~</u>	<b>~</b>		<b>~</b>	<b>~</b>	<b>~</b>		
Hatton–Rockall Basin, Area 1 (3c)	<b>~</b>	<b>~</b>		<b>✓</b>	<b>&gt;</b>	<b>✓</b>		
Hatton-Rockall Basin, Area 2 (3d)	>	<b>&gt;</b>		>	>	<b>~</b>		
Southwest Rockall Bank 2 (3e)	>	<b>~</b>		>	<b>&gt;</b>	<b>~</b>		
Southwest Rockall Bank 1 (3f)	>	<b>&gt;</b>		>	<b>&gt;</b>	<b>&gt;</b>		
Edora's Bank (3g)	>	<b>&gt;</b>		>	<b>&gt;</b>	<b>~</b>		
West Rockall Mounds (3h)	<b>&gt;</b>	<b>~</b>		<b>&gt;</b>	<b>&gt;</b>	<b>~</b>		
Logachev Mounds (3i)	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>~</b>		
Rockall Bank; South-West Rockall (Empress of Britain Bank), Area 3 (3j)		<b>~</b>		<b>~</b>		~		
Rockall Bank; South-West Rockall (Empress of Britain Bank) Area 2 (3k)	<u>~</u>	~		<u>\</u>	<u>\</u>			
Rockall Bank; South-West Rockall (Empress of Britain Bank) Area 1 (3I)		<u> </u>		<u>~</u>	<b>~</b>			
Rockall Bank; North West Rockall (3m)	<b>✓</b>	<b>~</b>		<b>~</b>	<b>~</b>	<b>✓</b>		
Hatton Bank (3n)	<b>~</b>	<b>~</b>		<b>~</b>	<b>✓</b>	<b>~</b>		
Irminger Sea Redfish Closure (4)		~	<u>~</u>		<b>✓</b>	<u>~</u>		



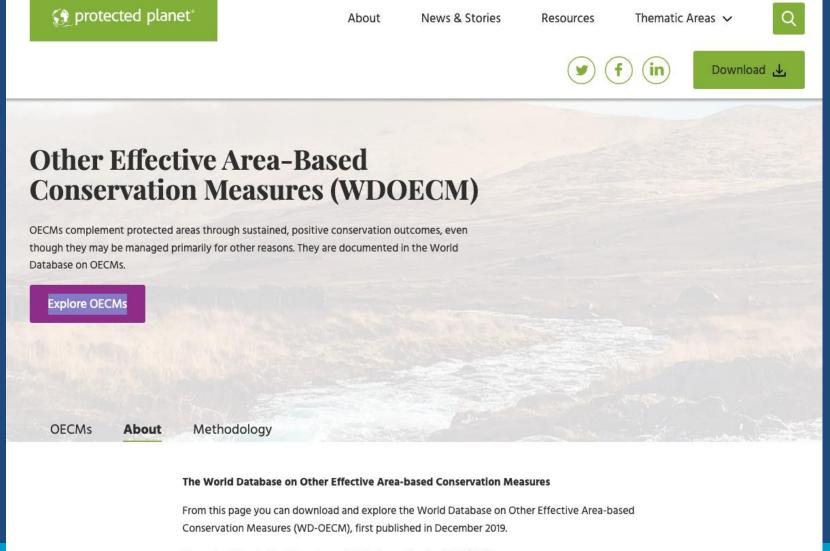
#### Consulting local communities?



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# The last step - reporting...





#### Thank You..



