



# Clean Catch: Reflections Workshop

9 May 2024



Department  
for Environment  
Food & Rural Affairs



Centre for Environment  
Fisheries & Aquaculture  
Science

ARRIBADA  
 *initiative*



Zoological  
Society  
of London





# Welcome

## Objectives for today:

- Reflect on Clean Catch
- Co-create building blocks for an effective Clean Catch expansion

## Rules of engagement:

- Provide constructive feedback with a solutions focus
- Create a safe space to share different perspectives
- Free Prior Informed Consent (FPIC)

## Housekeeping:

- Notetakers and anonymity
- MWC on hand throughout the day

Who is in the room today



■ Academic ■ Fishing industry ■ Gov Body ■ NGO ■ Tech



# Agenda

- **11.00am: Welcome and housekeeping**
- **11.10am: The bigger bycatch picture**
- **11.25am: Introducing the Clean Catch Expansion**
- **11.40pm: Clean Catch to date – Reflections**
- *12.30 – 13.15: Lunch*
- **13.15: Looking forwards – the structure and function of Clean Catch**
- **13.30: Interactive carousel**
- *14.50 – 15.00: Short coffee break*
- **15.30: Closing remarks**
- *15.40: Close*



# The Bigger Bycatch Picture

Jonny Peters - Deputy Head of  
Quota Policy and Negotiations  
Division

(Note: this presentation was given at the in-  
person workshop by Mike Dowell, Chief  
Negotiator for UK-EU fisheries negotiations at  
Defra)

# Policy context

## Overall aim:

- The principal requirement for the Clean Catch programme will be to deliver an initiative which helps meet the Government's ambitions that incidental catches of sensitive marine species are minimised, and where possible eliminated, as set out in the ecosystem objective of the Fisheries Act 2020.
- The Clean Catch programme will form a significant part of the strategic UK bycatch programme of work. Delivering pilot studies and trials, working closely with UK stakeholders to develop the evidence and knowledge underpinning work on bycatch.



# Marine Wildlife Bycatch Mitigation Initiative (BMI)

## The government set out its ambitions in the BMI

This includes commitments to:

- 1) Increase and diversify bycatch monitoring.
- 2) Develop and mitigation measures.





# Marine Wildlife Bycatch Mitigation Initiative (BMI)

**The ambition of the Clean Catch programme will be to support delivery of the BMI objective:**

- 1) Improve our understanding of bycatch and entanglement of sensitive marine species through monitoring and scientific research.
- 2) Identify “hotspot” or high-risk areas, gear types and/or fisheries for bycatch and entanglement in the UK in which to focus monitoring and mitigation.
- 3) Develop, adopt, and implement effective measures to minimise and, where possible, eliminate bycatch and entanglement of sensitive marine species.
- 4) Identify and adopt effective incentives for fisheries to implement bycatch and entanglement mitigation measures.
- 5) Work with the international community to share best practice and lessons learned to contribute to the understanding, reduction and elimination of bycatch and entanglement globally.



# Clean Catch aims and objectives

- 1) Supporting the implementation of the UK Marine Wildlife Bycatch Mitigation Initiative (BMI).
- 2) Expanding the geographical and species scope from the existing Clean Catch programme.
- 3) Implementing the recommendations from the Hauling up Solutions 2 workshop.

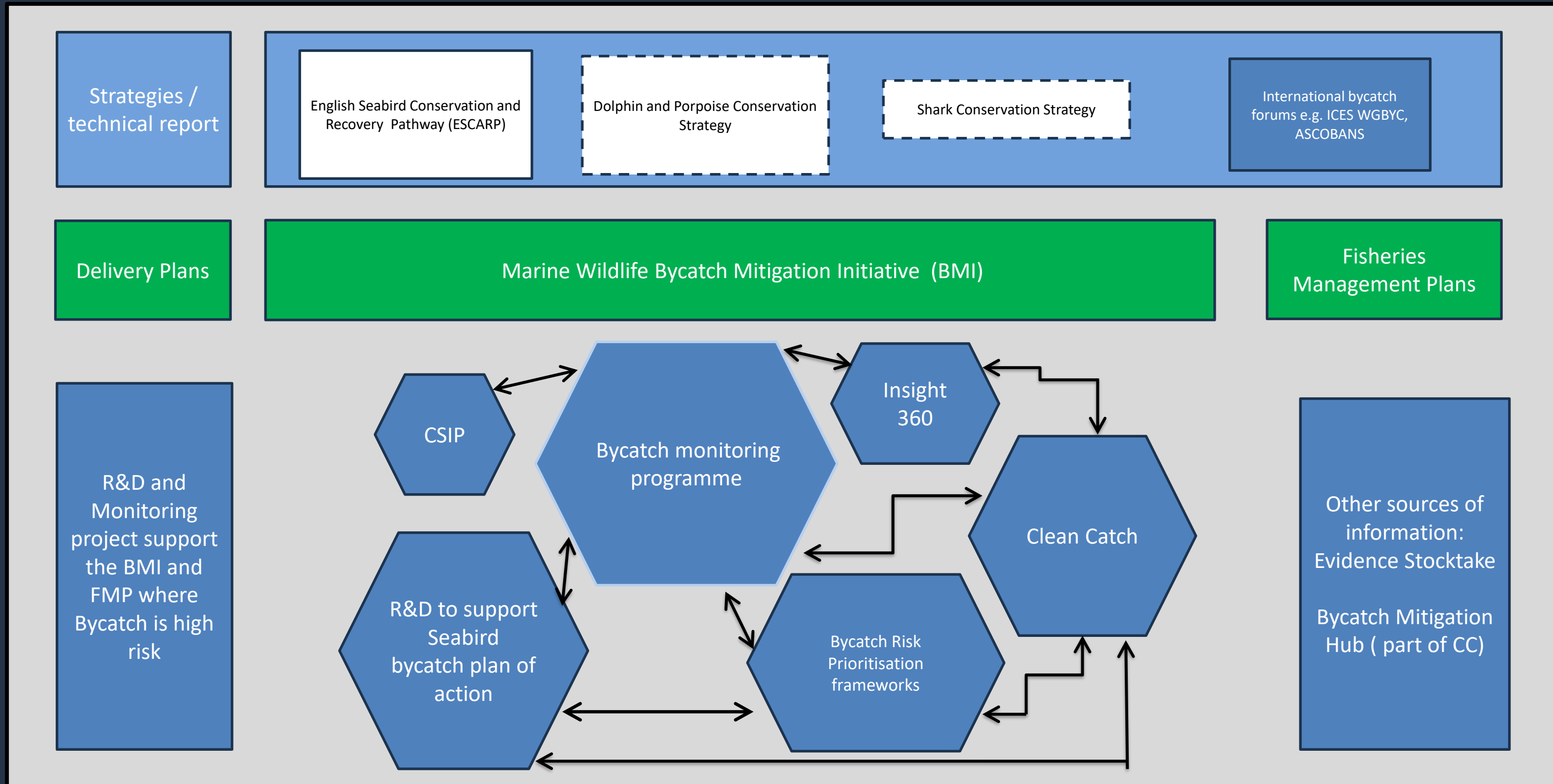
Recommendations included:

- Identifying key areas and fisheries at risk of sensitive species bycatch – through effective monitoring (existing and new)
  - Delivering trials on modified fishing gear, or modified fishing practices. Eight options were identified at the workshop that could be explored further to test for practicality, robustness, and effectiveness at reducing bycatch.
  - Developing best practice guides in collaboration with the fishing industry that could include advice on actions that could be taken to monitor and reduce bycatch
  - Building and strengthening collaboration around local trials of alternative gears or other methods to reduce bycatch, including clearly outlining roles and responsibility and feeding back results from trials.
- 4) All of the above are to be conducted in a collaborative way with close involvement of stakeholders including the fishing industry, scientists and NGOs. Implementation of a strong governance framework at local and national levels to oversee the programme to ensure stakeholders have a formal role in steering it.





# Defra's Bycatch Programme of Work





Introducing...

# **The Clean Catch Expansion**


Alasdair Davies, Arribaba



# Arribada Initiative

- A UK conservation technology research and development organisation focused on **open source solutions**.
- We co-develop conservation technologies with partners to solve conservation challenges.

# The Clean Catch programme

 **A collaborative programme key to the UK Government's ambitions to help minimise and – where possible – eliminate bycatch of sensitive marine species, as set out under the ecosystem objective of the Fisheries Act.**

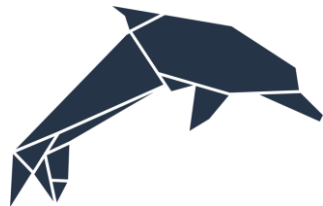
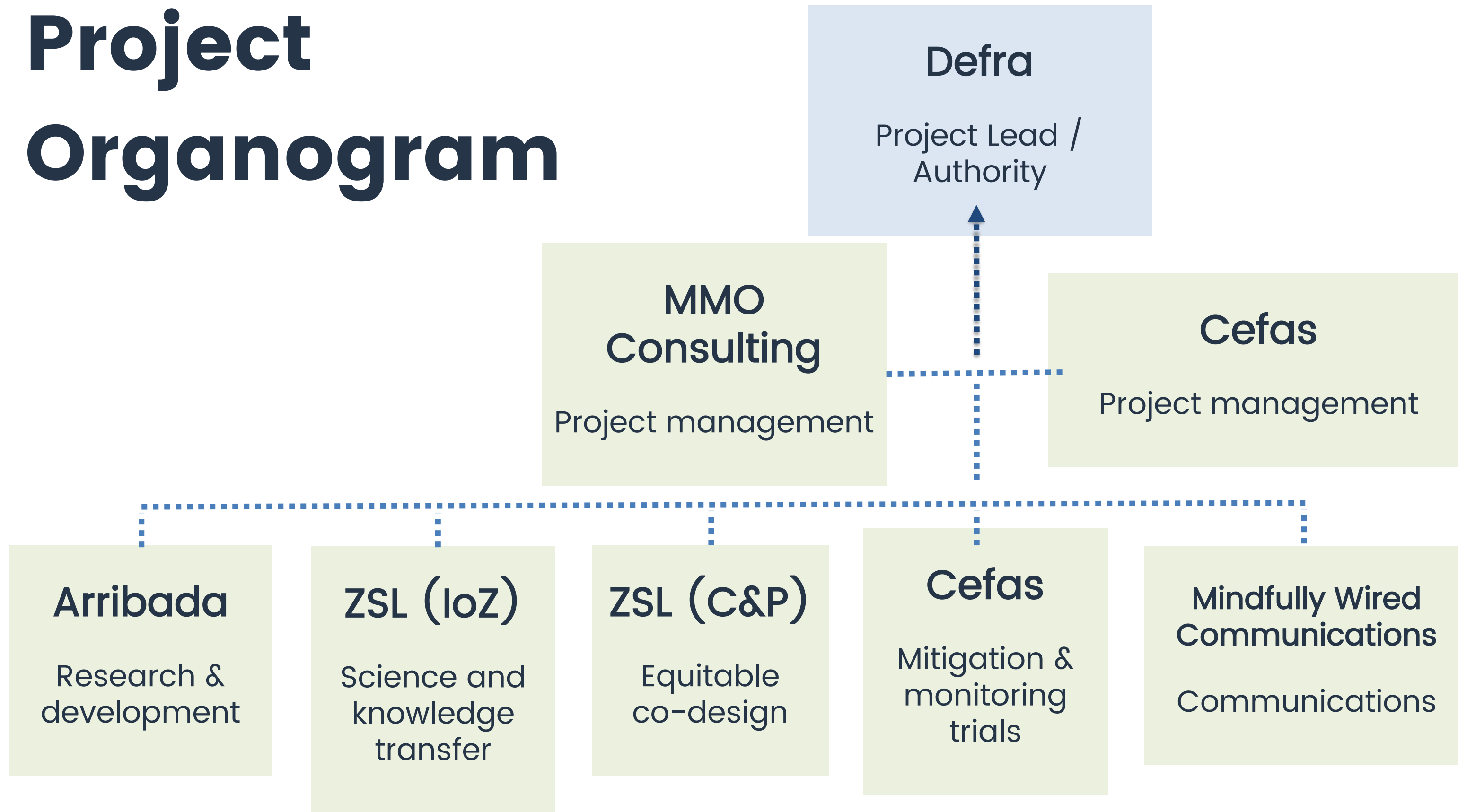
- Through co-designed research, dialogue and knowledge exchange, Clean Catch aims to contribute to improving the monitoring and mitigation of bycatch of marine mammals, seabirds, sharks, skates and rays



# Clean Catch Expansion – Consortium Partners

Person or organisation	Lead for:
MMO Consulting	Programme management
Mindfully Wired Communications	Communications
Arribada Initiative	Research & development
Zoological Society of London	Science and fisher co-design
Cefas	Mitigation and monitoring trials
Strategic oversight and leadership from Defra	

# Project Organogram





# Clean Catch (Expansion)



## Objectives & goals for discussion

- Work closely with adjacent initiatives, including Insight360 and the Bycatch Monitoring Programme.
- Enhance inclusion and representation of key people and groups via equitable co-design.
- Expand geographical focus beyond the Southwest.
- Complete a comprehensive bycatch hotspots review.
- Establish new mitigation trials, potentially focusing on other wildlife group(s).
- Support trials of Passive Acoustic Reflectors.
- Understand and overcome barriers to broader fisher engagement

# Clean Catch (Expansion)



## Objectives & goals for discussion

- Develop novel interdisciplinary approaches to monitor, analyse and assess results of case study monitoring and mitigation trials.
- Deliver bycatch mitigation guides, written with and for the fishing industry.
- Foster national and international knowledge exchange (particularly new EU consortium programme for bycatch 'CIBBRiNA')

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All Clean Catch work underpinned by strategic engagement  
and communications

# Project Timeline

2024-25

Reflection workshops

Continuous acoustic monitoring using PODs

Bycatch mitigation / pinger trials

UK bycatch hotspots review

Tools for bycatch monitoring (self-reporting & REM)

Equitable engagement and co-design with local fishery partners

2025-26

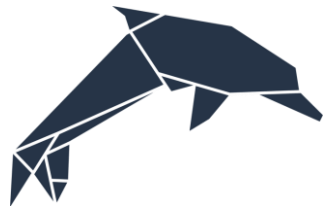
Best practice guides developed

Passive Acoustic Reflector (PAR) trials

Mitigation/monitoring trial begins (new location/taxa/gear)

Interim analysis of trial monitoring data

2026-27





# **Clean Catch to date: Reflections**

Joanna Murray  
Cefas

# Clean Catch – to date

-  **The Clean Catch UK programme was led by Cefas and delivered with partners including Mindfully Wired Communications and the Arribada Initiative.**
-  **Funded by Defra since 2019, CCUK set out to work directly with the fishing industry to collect industry-led data on where PETS bycatch occurs and how it can be reduced, and to support the UK's PETS bycatch policy objectives (BMI).**



## Monitor PETS population and abundance

Passive acoustic monitoring – Can monitoring of underwater sound be used as an effective and reliable method for understanding the presence and distribution of cetaceans in an area of higher bycatch risk?

## Monitor PETS bycatch

Self-reporting – What tools are available for industry to self-report, and can they be used to generate reliable data on PETS bycatch?

Remote Electronic Monitoring – Can REM be used to develop protocols for PETS bycatch monitoring, and to validate skipper self-reported data?

## Develop PETS bycatch mitigation tools

How do acoustic deterrents perform in reducing bycatch of common dolphins in a southwest net fishery?

Can passive acoustic deterrents that are co-designed by fishers offer an effective cetacean bycatch mitigation?





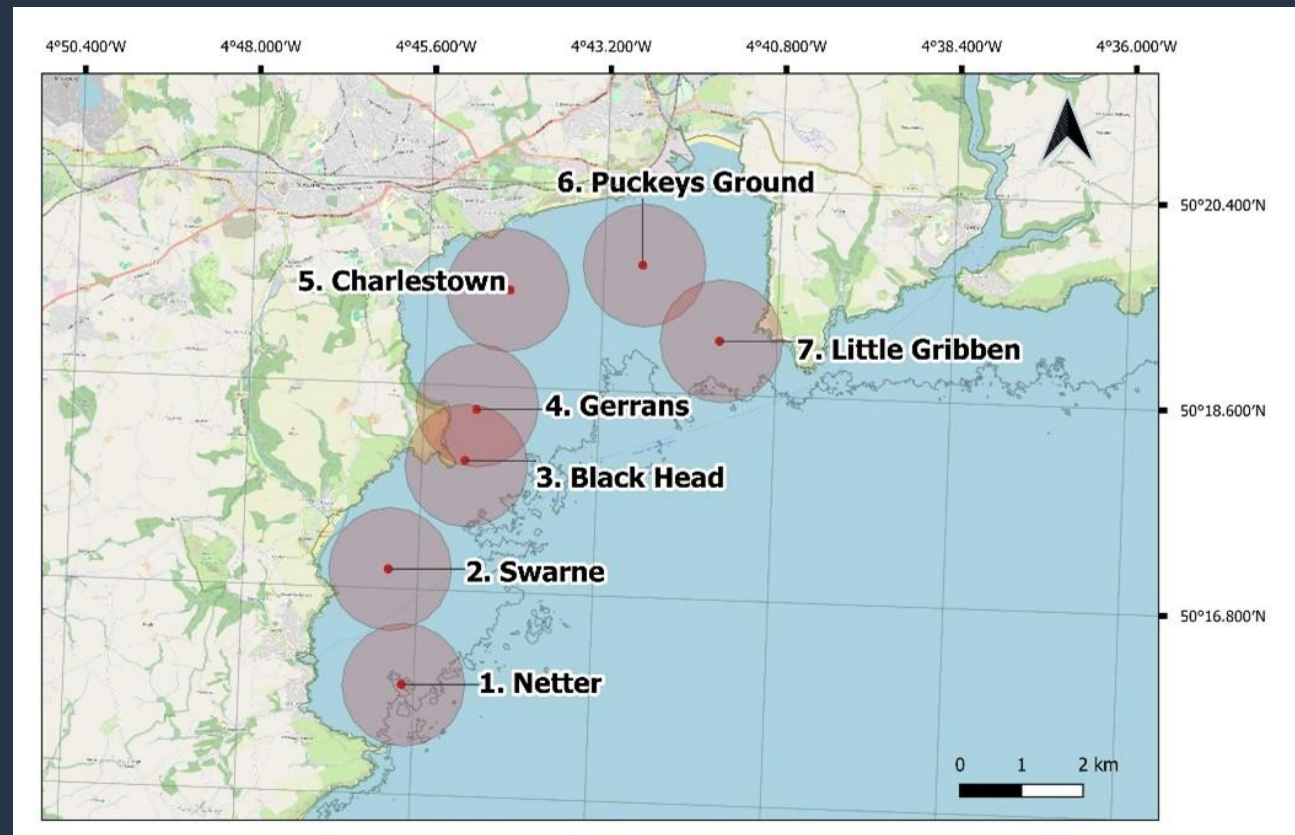
# Monitoring of abundance and distribution



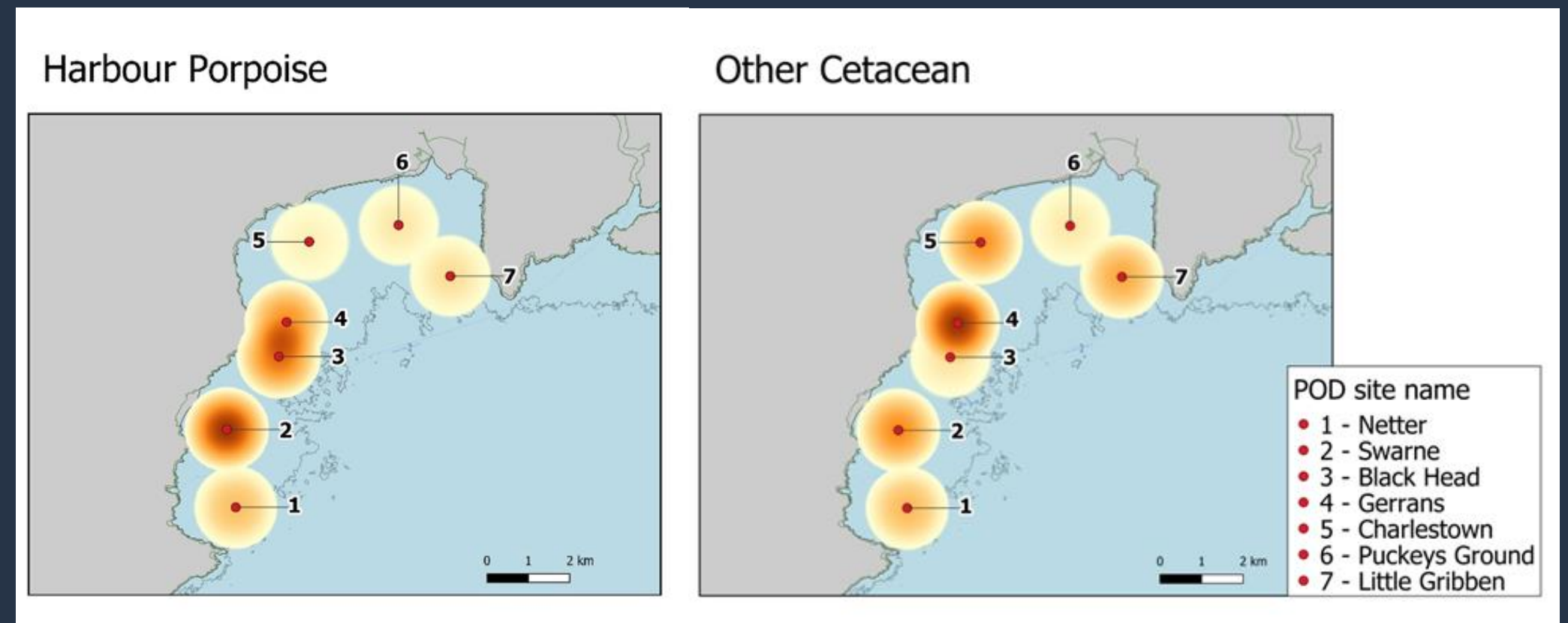
PODs to monitor the presence of cetaceans within an area of known PETS bycatch



Once the quality of the data is understood, overlap between fishing activity and cetacean distribution will be explored.



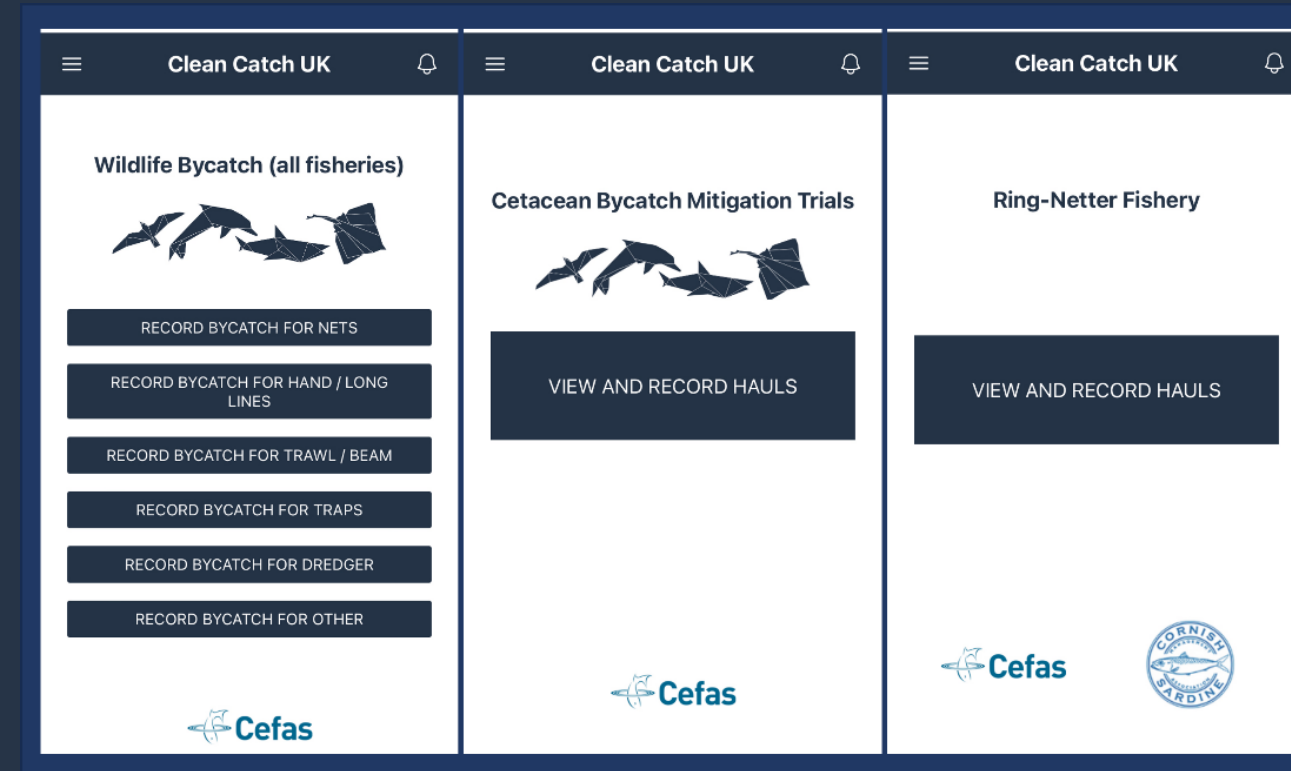
Mooring locations. For each POD deployed showing the 1 km maximum detection range around the device.



Total detection positive hours (DPH) for each animal group over the study period. Darker colours correspond to higher levels of DPH for a given POD.

# Monitoring of bycatches

**Self-reporting:** A smartphone app (CCUK app) has been developed by Cefas, fishers and AST Marine Sciences Limited to enable the voluntary reporting of PETS bycatch.



**REM:** being used to develop protocols for bycatch monitoring, build image libraries (AI), used to validate self-reported data provided by the skippers on the CCUK app (including in the pinger trial).

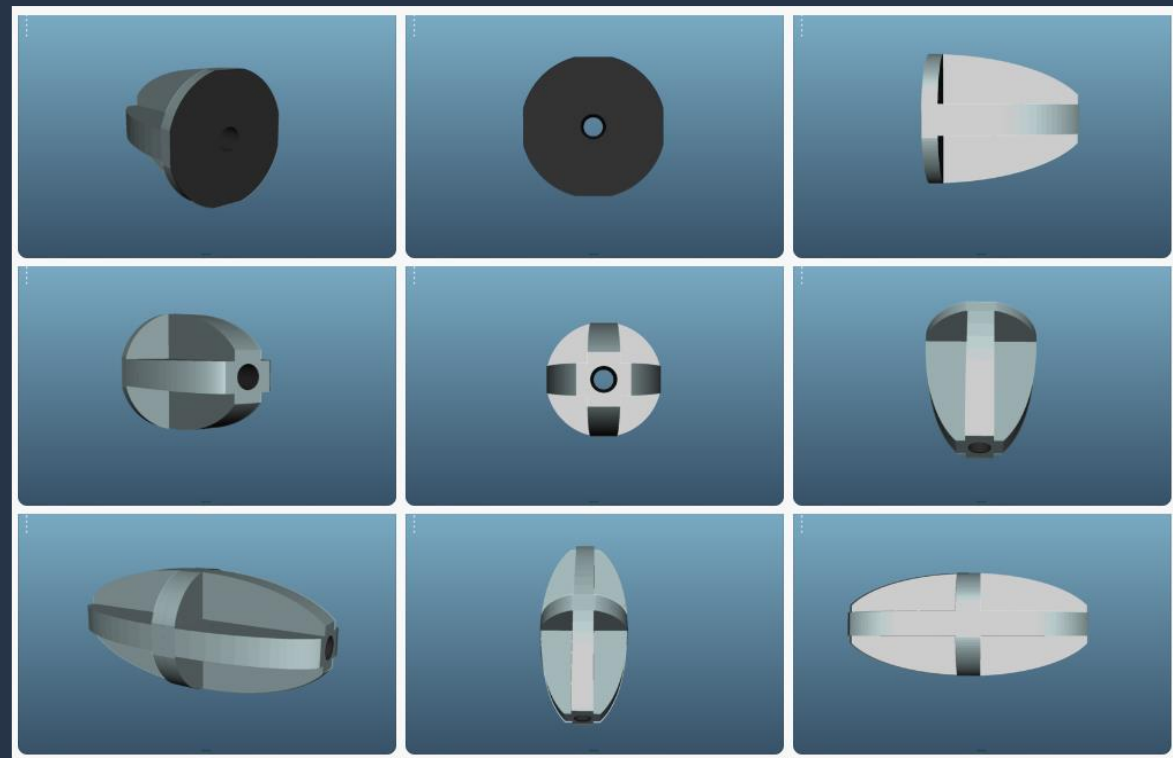


# Mitigation of bycatches

Pingers: Trial paused after last NSG, during “pinger working group” a simplified “paired net” design was proposed and discussed. Planned re-start May 2024, extended geographical scope, more skippers, sharing of REM footage with BMP.



FishTek Marine 'Banana pinger'



## Passive Acoustic Reflectors: Arribada

Initiative co-developed with fishermen a low-cost PAR suitable for attachment to fishing gear via a single point attachment.

Practicality and robustness testing planned for 2024.





# Reflections

## Who was asked and who responded

Survey link sent to 143 recipients (note this includes consortium team/Defra and a portion are those who have not been engaged in Clean Catch previously).

Eight responded to the online survey (4 x NGO, 1 x fishing industry, 1 x government body, 2 x science & research)

Six southwest fishers were engaged in conversations.

Other feedback from NGOs, Government bodies and science/research came in through informal conversations/emails.



# Programme scope



## **Design**

- Reinventing the wheel.

## **Geography**

- Suggestions for UK-wide reach and link with international initiatives.

## **Taxa**

- Positive for the inclusion of all impacted taxa, with suggestions to focus on seals.

## **Governance**

- Strong science is essential, trial locations should be based on bycatch evidence.

# Collaboration and inclusion



## Governance

- NSG meetings had too many voices, conflicts and repeated discussions. Concerns were not heard, and roles were unclear.
- Communication with Cefas had improved and meetings were useful.
- Suggestions to work regionally with local fishers, improve collaboration and for the project to tolerate differences in opinions.



## Politics

- Distrust of political motives, needing clear communication of benefits to the fishing industry.





# Collaboration and inclusion



## Representation

- Lack of key actors with bycatch experience and lacking fisher involvement. Independent expert advice not acted upon and some actors feeling excluded.
- Fisher representation and involvement. Array of backgrounds and expertise from government to fishing industry.
- Suggestion to include wider community and present at more events.



## Communication

- Comms lacking following Hauling Up Solutions, but effective and open discussions.



## Trial

- Input from the trials was not taken on board.
- Positive feedback for the implementation of bycatch mitigations.

# Data collection



## Data

- Critical of app having self-reporting flaws (science/research).
- Positive feedback for the simplicity and efficiency of data collection methods e.g. app and Anchorlab (fishers).



# Transparency in communication

## **Communication**

- Lacked comms on progress and updates. Suggested quarterly update emails.

## **Governance**

- Lacking transparency of finance and NSG member sign-up.
- Suggestions to increase transparency and clarity and flag updates through emails.

## **Scope (links to programme scope)**

- Aims and objectives were unclear. Uncertainty over the different SW projects.

## **Website**

- Positive feedback for the Mitigation Hub Review.



# Trial design and execution



## Governance

- Lacking regional groups outside SW. Disregard for expert opinion.

## Representation

- Suggestion to increase fisher recruitment and involvement.

## Scope

- Suggestions to include voluntary bycatch reporting, compulsory REM, align with wider PET policies.

## Trial

- Trials should have recruited/retained more fishers and lacked robust data.
- Disappointment in removing lights; fishers prevented from using pingers.
- Suggestions to focus on effective solutions and bycatch areas.
- Suggestions to consider alternative gears and spatial management.



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 **ZSL** Zoological  
Society  
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# Thank you

Joanna Murray  
[Joanna.murray@cefas.gov.uk](mailto:Joanna.murray@cefas.gov.uk)





# **Clean Catch to date: Your reflections**

Breakout group discussions (20mins)  
Feedback to main group (10mins)





# Lunch break

New fishery partner:

- Your suggestions please!

Please return promptly for this afternoon's session at 13.15. Thank you.

# Criteria for shortlisting candidate new fishery partner

These are **draft** essential and desirable criteria for a new fishery partner(s) in Clean Catch to trial monitoring and mitigation. These should be used to seek and shortlist candidate partners and ultimately select the fishery(ies) we will work with in Project Years 2 and 3 of Clean Catch. Any feedback or suggestions would be really helpful...

## Essential criteria

- **Has a bycatch issue** with marine mammals and/or seabirds and/or elasmobranchs
- Is a fishery with **English vessels/port/waters**
- There is **appetite from the fishery**, perhaps because for the fishery bycatch poses a risk, or is costly, or a barrier to eco-label/certification, or results in negative PR, or conflicts with their environmental commitments. The fishery demonstrates willingness to be **actively involved** providing access, sharing information and/or committing resources (time, people or money).
- **Sufficiently large fishery** in terms of the number of fisher/vessels. A larger fishery offers more opportunities to gather meaningful monitoring data and conduct informative mitigation trials.

**Do you have feedback on these criteria, or, even better, do you have a suggestion of an appropriate fishery?**

Please put your thoughts in the Zoom chat, or email [stephen.long@ioz.ac.uk](mailto:stephen.long@ioz.ac.uk)



# Welcome back

## Afternoon objective:

- **Shape equitable governance mechanisms**

## Afternoon agenda:

- **13.15: Looking forwards – the structure and function of Clean Catch**
- **13.30: Interactive carousel**
- *14.50 – 15.00: Short coffee break*
- **15.30: Closing remarks**
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# **Looking Forwards: Equitable Governance**

Milly Oakley –  
Clean Catch Programme Manager,  
MMO Consulting

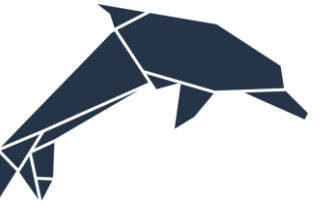
# Equitable Governance Framework



## Key Objective:

Establish a **new streamlined governance framework to better engage with relevant actors and co-design** the programme

**Aim:** effective **fisher-led, science-based Clean Catch project activities** including bycatch mitigation trials, best practice guides, knowledge exchange



# Equitable project co-design

**Governance  
framework**

**Streamlined, effective  
Appropriate people/groups  
Equitable input & co-design  
Agile, transparent decision-  
making**

**Tailored outreach to ensure  
inclusion  
Dedicated fisher liaison**

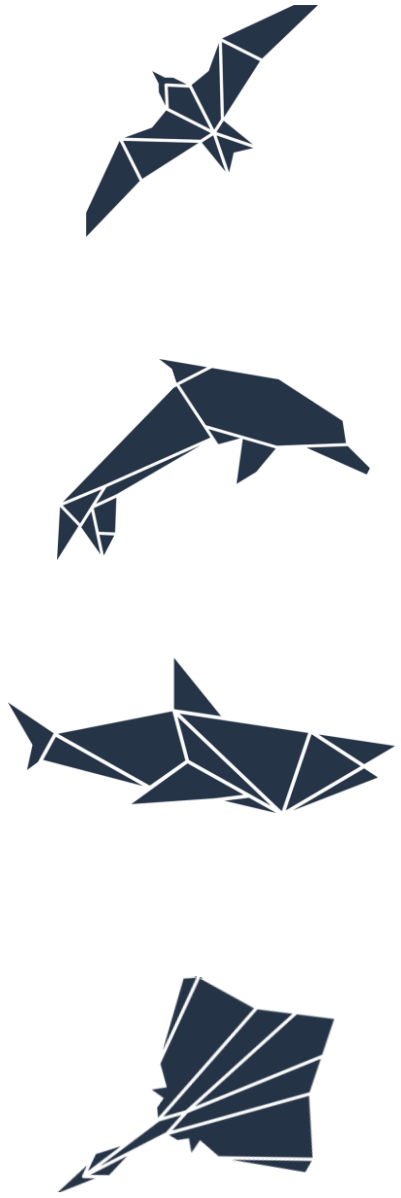
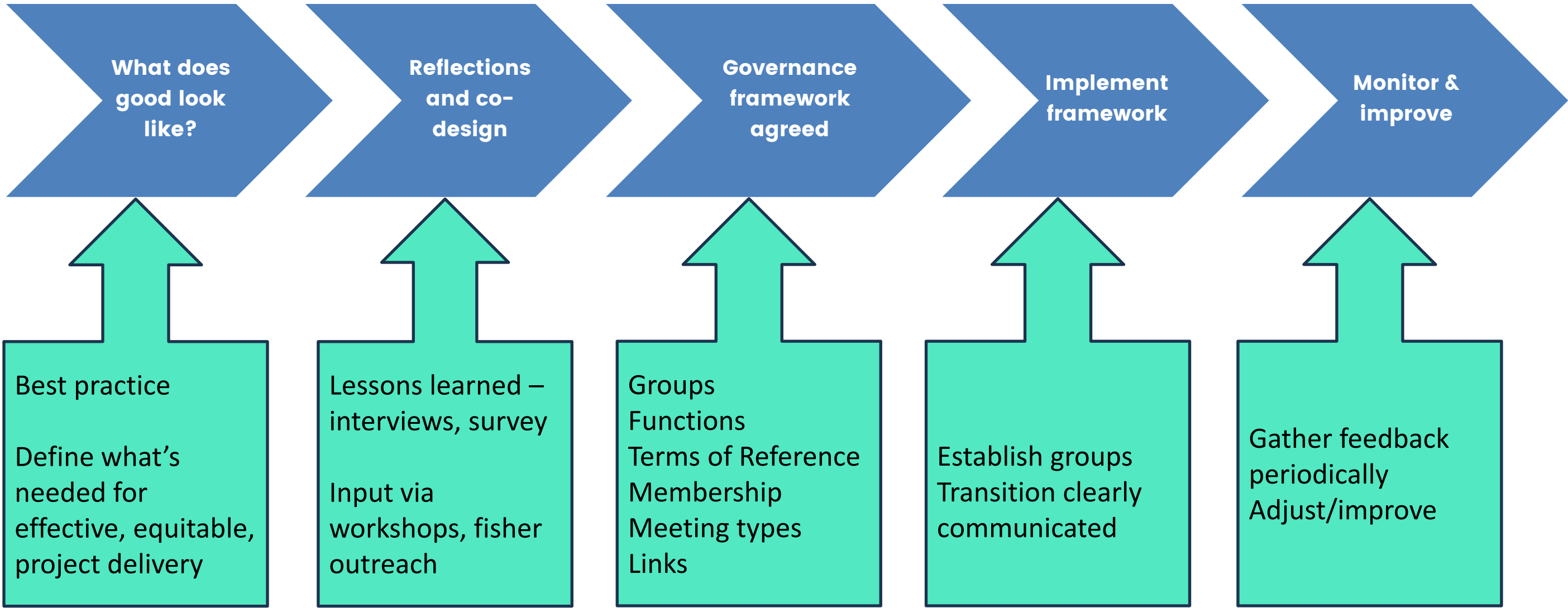
**Engagement  
& Outreach**

**Comms &  
Networking**

**Effective communication &  
information sharing  
Forging links with existing  
groups and networks**

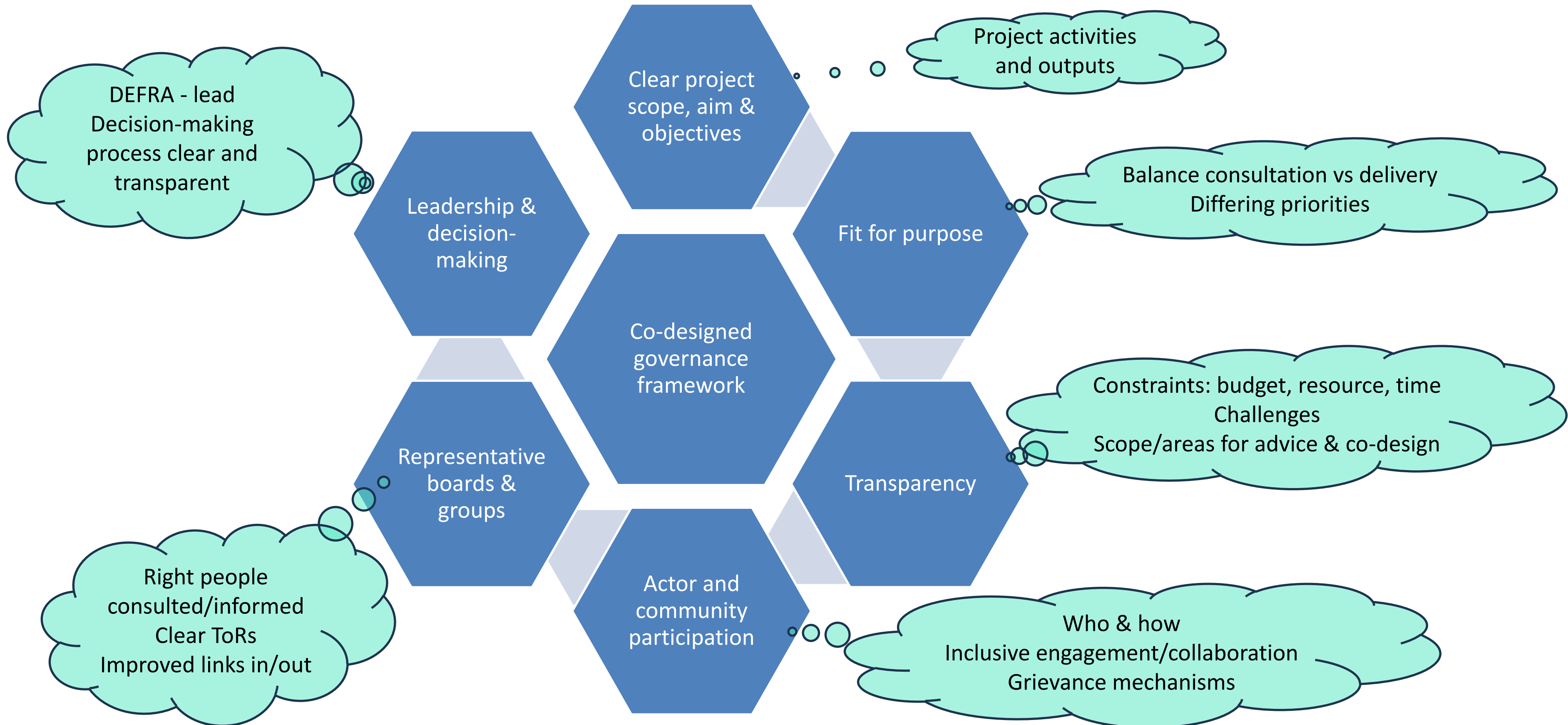


# Governance Framework – Design Approach

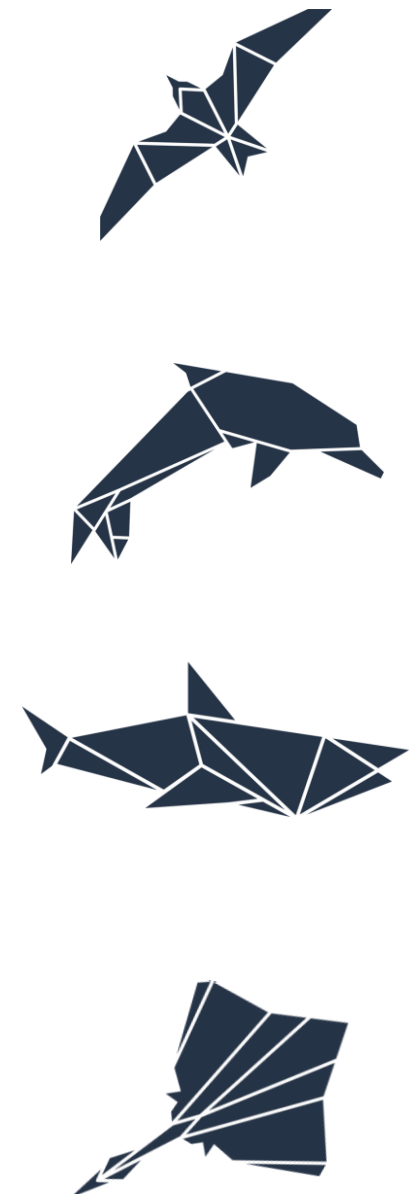
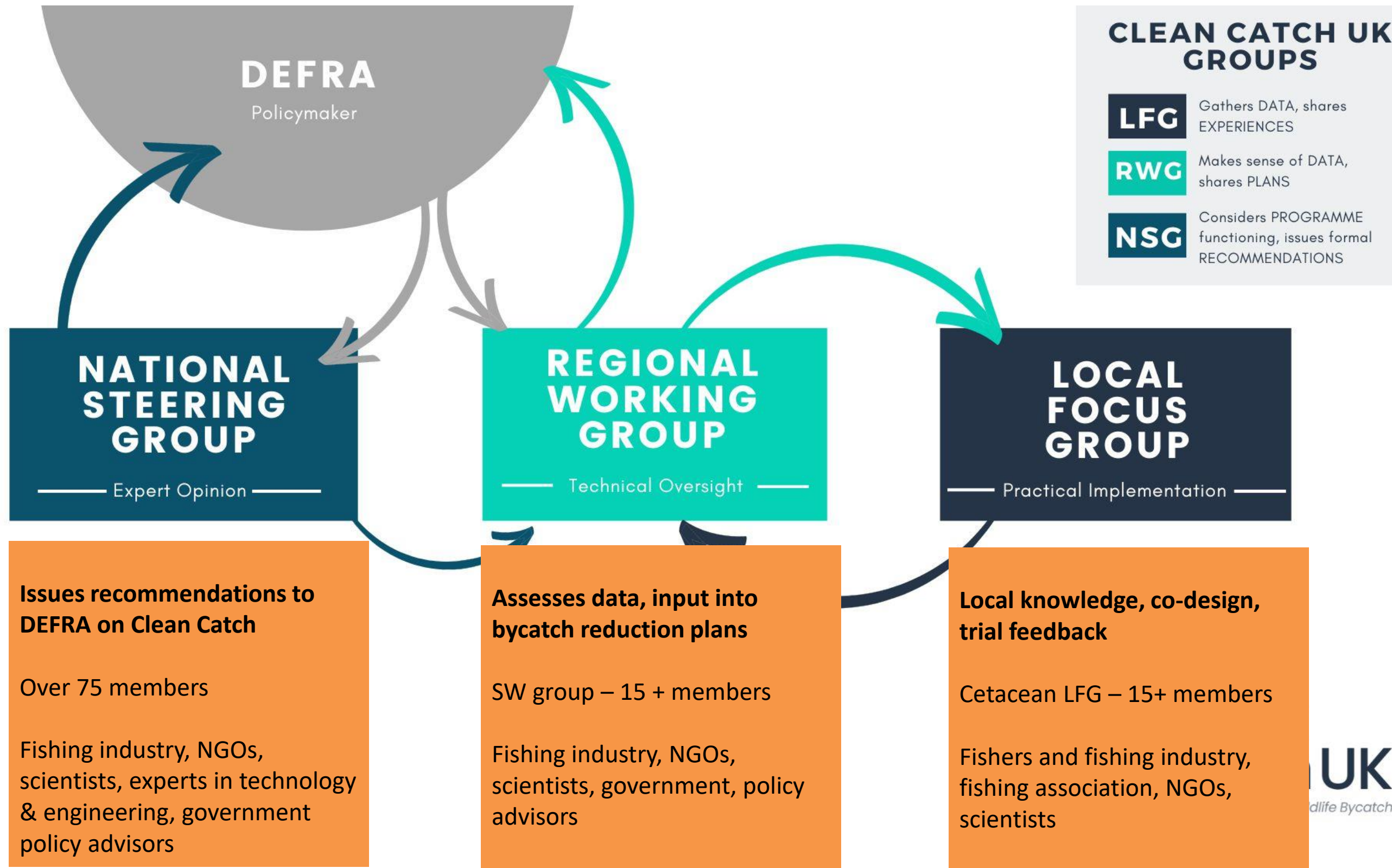




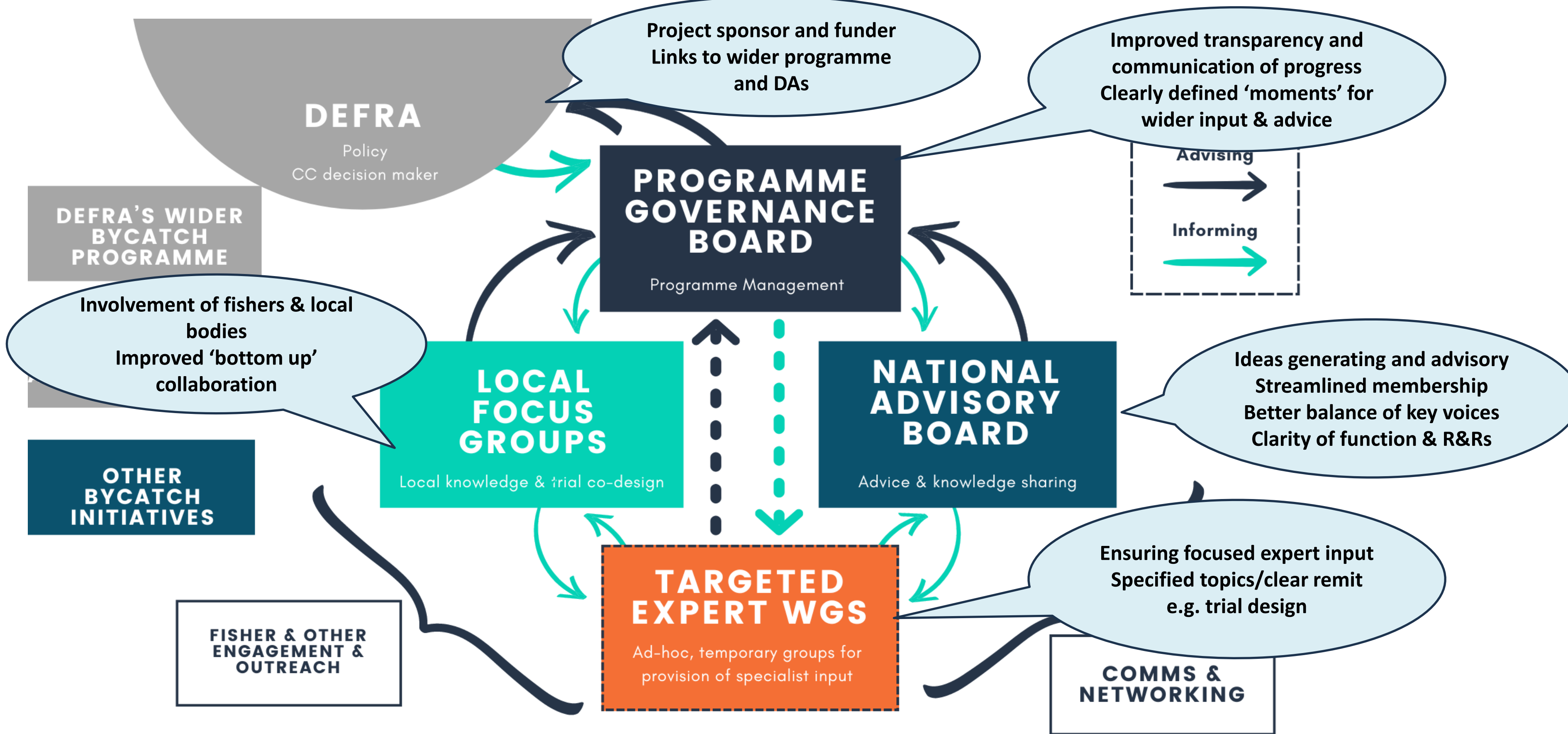
# Best practice – design principles



# Governance – Clean Catch to date



# Governance – straw man ideas

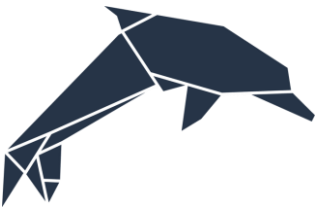


# Governance – straw man ideas

- Programme Governance Board (delivery team, DEFRA. Observer seats for 2–3 key group reps incl. fishers) – **programme management & direction**. DEFRA is project authority & **decision-maker**
- National Advisory Board (fishers, fishing industry & producer orgs, NGOs, Scientists, Engineers with relevant expertise) – **advisory function, ideas generating, knowledge sharing**
- Local focus groups existing SW cetacean & new group for new trial location (fishers and associations, IFCA, local NGO, MMO) – **local knowledge, co-design and practical implementation**
- Targeted (temporary) expert working groups – (membership dictated by remit) – **expert input and advice**

# Next steps

- Gathering feedback on straw man & input to co-design
- Finalise governance framework design
- Implement







# **Equitable Governance - Clean Catch Expansion**

## **Three rotating stations:**

- 1) How can all voices be heard?**
- 2) Transparency in information flow**
- 3) Who makes up the Clean Catch network?**

**25 mins at each station**

**14.50: Short coffee break**

**15.00: Reconvene as a group for feedback**



# Closing Remarks

Brigid Finlayson

Defra





# Next steps:

- **Thank you**
- **Was today useful?**
- **Slido.com - 4148750**
- **Next steps**





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**Thank you**

