



Marine
Management
Organisation

Fisher Engagement Capacity Needs (MMO1383)



Report prepared by:
ICF

Report prepared for:
Marine Management Organisation

Project funded by:

...ambitious for our seas and coasts

Marine Management Organisation

© Marine Management Organisation 2024

You may use and re-use the information featured on this publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit www.nationalarchives.gov.uk/doc/open-government-licence/ to view the licence or write to:

Information Policy Team
The National Archives
Kewnor
London
TW9 4DU
Email: psi@nationalarchives.gsi.gov.uk

Information about this publication and further copies are available from:

Marine Management Organisation
Lancaster House
Hampshire Court
Newcastle upon Tyne
NE4 7YH

Tel: 0300 123 1032
Email: info@marinemanagement.org.uk
Website: www.gov.uk/mmo

Disclaimer:

This report contributes to the Marine Management Organisation (MMO) evidence base which is a resource developed through a large range of research activity and methods carried out by both MMO and external experts. The opinions expressed in this report do not necessarily reflect the views of MMO nor are they intended to indicate how MMO will act on a given set of facts or signify any preference for one research activity or method over another. MMO is not liable for the accuracy or completeness of the information contained nor is it responsible for any use of the content.

When referencing this publication, please cite as:

MMO (2024). Fisher Engagement Capacity Needs. A report produced for the Marine Management Organisation, MMO Project No: 1383, May 2024, 43pp

Contents

Executive summary	6
1. Introduction	8
1.1 Study context	8
1.2 Fishers' engagement.....	8
1.2.1 The Regional Fisheries Groups (RFGs)	9
1.3 Study rationale	12
2. Methodology	13
2.1 Behaviour change approach – the integrated model.....	13
3. Findings and suggested solutions	14
3.1 Motivation.....	17
3.1.1 Barriers	17
3.1.2 Potential solutions.....	20
3.2 Choice	25
3.2.1 Barriers	25
3.2.2 Potential solutions.....	26
3.3 Execution	27
3.3.1 Barriers	27
3.3.2 Potential solutions.....	29
3.4 Outcome and feedback	30
3.4.1 Barriers	30
3.4.2 Potential solutions.....	31
4. Conclusions	33
5. Recommendations	34
Annex 1 Semi-structured interviews: topic guides	40
A1.1 Topic guides [Fisher representatives]	40
A1.2 Topic guides [Fishers].....	41

Figures

Figure 1: Attendance rate by region and type of meeting (drop-in sessions <i>versus</i> RFG meetings with averages).	11
Figure 2: Share of invitees and attendance rate per region.....	12
Figure 3: Integrated model of behaviour.....	14
Figure 4: Summary of the barriers identified.	15
Figure 5: Example invitation to RFG meeting.	20
Figure 6: Example of amended invitation.	24
Figure 7: Constrained optimisation.....	26

Tables

Table 1: Interviews sample.....	13
Table 2: Barriers, source of information and proposed solutions and/or actions....	15
Table 3: Actions to encourage engagement in consultations based on the EAST framework.....	29

Executive summary

A key feature of the Fisheries Management Team in the Marine Management Organisation (MMO) is effective engagement with those affected by its management measures. Successful engagement will ensure that measures are informed by the realities faced by fishers and those working in the fishing industry.

Despite efforts within the MMO for inclusive and collaborative approaches to the development of management measures, the MMO has sometimes faced challenges in engaging with fishers in consultation and decision-making settings, such as through working groups and coastal engagement activities.

Given the extensive scope of engagement, this study focuses on stakeholder involvement in Regional Fisheries Group (RFG) meetings specifically as a relatively new form of engagement for the MMO. To collect insights on fishers' engagement barriers and facilitators, ICF reviewed relevant material from the MMO about its engagement processes as well as wider literature relevant to increasing engagement, and conducted interviews with one recreational fisher, four staff from the MMO, three fisher representatives and one Fish Producer Organisation member of staff.

The MMO commissioned ICF to explore the engagement needs of fishers and fisher communities and identify the barriers to their engagement needs using a behavioural approach. Furthermore, the data analysis was informed by ICF's integrated model of behaviour (Barnard, 2023), which led the study team to identify participation barriers that span the whole length of the behavioural pathway. These pathways range from "motivation" (the conscious and unconscious cognitive processes that direct and inspire fishers' behaviour) to "choice" (element that focuses on the options available to fishers and the process of how they choose which options to select), "execution" (including fishers' opportunity and capability to perform a behaviour) and "outcomes and feedback" (fishers experience of the behaviour itself, and its impact).

Among the barriers, the study found that:

- Fishers' motivation to join the MMO's meetings can be impaired by a **lack of trust** in the MMO and doubts about the impact of their involvement. Also factors such as individualism, lack of interest, antagonism within fishing communities and a perceived **lack of skills and confidence** to contribute to the discussion can hinder participation.
- **Fishers need to fish**, and attending the MMO's meeting may represent a loss of income for them. Consequently, they might choose to decline a meeting invitation to prioritise fishing activities.
- The **irregular working hours of fishers**, characterised by long shifts, along with challenges in accessing meeting locations and a lack of skills and confidence in utilising online tools, can be a **disincentive to participation**.
- Fishers felt that their inputs were disregarded during certain meetings. This, coupled with the significant time lag between the discussion and the **institutional inaction**, further increased the sentiment of being ignored. Additionally, there is a **consultation fatigue** that is negatively impacting participation.

Drawing on solutions suggested by research participants, literature and behavioural models, examples of approaches used in other contexts, and the research team's ideas, ICF has suggested a wide range of potential solutions to target one or more of the barriers. Together, the solutions represent a substantial programme of work that could help the MMO to achieve its ambition of a step change in its relationship with stakeholders.

1. Introduction

1.1 Study context

The Marine Management Organisation (MMO) is an arm's length body whose purpose is to protect and enhance the marine environment and support UK economic growth by enabling sustainable marine activities and development. Created in 2010 through the Marine and Coastal Access Act, the MMO ensures compliance with both national and international marine regulations to which the United Kingdom (UK) is a signatory (MMO, 2020).

MMO functions are further detailed in the Fisheries Act 2020 where provisions in relation to fisheries, fishing, aquaculture and marine conservation are listed as eight fisheries objectives (JFS Defra 2002). The eight fisheries objectives creates the legal requirement for the UK's four national fisheries policy authorities (i.e. the MMO, Scottish Ministers, Welsh Ministers, and the Northern Ireland department) to produce the Joint Fisheries Statement (JFS Defra 2002) laying out how these objectives will be met. The JFS and other policy documents, such as the Marine Policy Statement (HM Government, 2011), the 25 year Environment Plan (HM Government, 2018), and the Corporate Strategy (MMO, 2020), explains that the MMO will modernise to work more closely with the industry and involve fisheries stakeholders in decision-making to increase the acceptability of, and adherence to policies and regulations.

An important part of the MMO's fisheries management work is effective communication with those affected by the management measures, and in its 10-year vision (MMO 2020), the MMO set out to find new ways of working with its stakeholders. Despite efforts within the MMO for inclusive, collaborative approaches in the development of management measures, the MMO has faced challenges in engaging fishers in consultation and decision-making *fora*, such as working groups and coastal engagement activities.

The MMO commissioned ICF to investigate the engagement requirements of fishers and fisher communities and identify the barriers that impede and/or make it difficult for them to communicate with the MMO using a behavioural lens approach.

1.2 Fishers' engagement

The MMO engages and consults with fishers on its services (fisheries management, conservation and marine planning), using a variety of tools, including: drop-in sessions, formal meetings, annual port visits, communication activities (newsletters and weekly emails), and *ad-hoc* workshops (MMO, 2022a).

These engagement activities are carried out by different teams across the organisation:

- The Coastal Teams engage daily with fishers whilst carrying out their compliance and enforcement duties.

- The Fisheries Management Team engages with fishers on changes to management, fishing vessel licences and quota.
- The RFGs, whose teams engage with fishers whilst overseeing the various regional groups.
- The Marine Conservation Team engages about Marine Protected Areas and conservation issues. Marine Planners also engage with fishers, as do the Grants and Licencing teams.
- Fisheries Management Plans, when delivered by the MMO, who engage fishers and stakeholders to deliver stock-specific action plans for sustainable management.

Meetings and activities are promoted via emails, posters at harbours, social media posts, mails, text messages, and via direct contact with fishers (*Ibidem*). The use of a variety of communication channels is intended to accommodate the different preferences within the fishing community¹.

1.2.1 The Regional Fisheries Groups (RFGs)

Given the extensive scope of engagement the current study focuses on stakeholder attendance at RFG meetings. These groups were established in 2020 to engage with historically hard-to-reach stakeholders, such as the inshore and non-sector fleet. The RFGs were founded by the MMO and Defra with the aim to increase collaboration and partnership to inform decision-making at a local level. In particular, the MMO aimed to engage with the inshore fleet – normally vessels under 10 metres (U10m) – and the non-sector fleet defined by the MMO as “*vessels without Producer Organisation membership*” (MMO 2022b: p.18). Engaging with these groups has been more challenging compared to vessels that are members of Fish Producer Organisations, where there is an organisational structure that facilitates communication between its members and regulators.

The MMO is seeking to enable an effective working relationship with all fishers including the inshore sectors, and the RFGs are one platform through which these relationships can be established and maintained. In addition, RFGs provide all stakeholders involved in fisheries management with an understanding of the challenges and opportunities faced by the fishing industry regionally. Currently there are five RFGs covering the following regions (MMO 2022a):

- North-east (NE 4b): Berwick to Cleethorpes/Grimsby Port.
- North-west (NW 7a): Hoylake to the Scottish Border at Carlisle.
- South-east (SE 4c): Mablethorpe to Hythe.
- South (S 7d): Dungeness to Swanage.
- South-west (SW 7efg): Worth Matravers/Saint Alban’s Head around the coast of Cornwall, to Bristol – this includes the Isles of Scilly.

¹ Fishing community can be defined as “the fishing industry is seen to be the forum through which community bonds, values, knowledge, language and traditions are established, confirmed and passed on’. The fishing industry is ‘the way of life’ for the community, and the community understands and makes sense of the world from a perspective that is garnered from years of involvement with the fishing industry. For fisheries-dependent communities, fishing is the glue that holds the community together’ (Brookfield et al, 2005, 56)”

A dedicated team was set up to ensure the smooth running of the RFGs. The teams comprised of both Defra and the MMO staff, and included members assigned to oversee specific groups (i.e. regions), including the organisation of the meetings and the effective dissemination of their outcomes. Meetings are held up to three times a year. Stakeholders include the fishing industry, Centre for Environment, Fisheries and Aquaculture Science (Cefas) and Inshore Fisheries and Conservation Authorities (IFCAs). These stakeholders are alerted ahead of the meetings about the topics of discussion to allow them to contribute. Representatives from Seafish, and the Maritime and Coastguard Agency (MCA) are invited to attend the meetings to contribute to discussions (*Ibidem*).

The MMO informs fishing communities about upcoming RFG meetings by sending an email and/or a text message. Usually, the date of the next meeting is communicated at the end of the previous meeting and subsequently published on the MMO website. Meetings are promoted via the RFGs Newsletters, social media and sometimes *in loco* via printed materials (posters) on the quay and with the help of the MMO Marine Officers and Coastal Officers, as well as fisher representatives. After the meeting, meeting notes are sent for feedback to all attendees. Discussion outcomes are reported in the RFG quarterly newsletter² in a “*you said, we did*” format.

Nevertheless, engaging with fishers continues to present challenges. According to the 2022 RFG Handling Plans (MMO 2022c, 2022d, 2022e, 2022f, 2022g) from different regions, MMO encountered:

- Poor attendance from industry (RFG NE 4b); it is believed the lack of attendance is due to the perceived limited results obtained by the various schemes used to develop the local fishing industry (RFG NW 7a).
- Domination by some characters who monopolise the debate by pushing for their own interests; this behaviour is seen as deterring other industry members from attending and preventing the group from progressing (RFG SE 4c).
- The same attendees coming to the meetings and focussing on the same issue (RFG S7d).
- Poor attendance from fishers (RFG SE 4c); also, many fishers are part-time and reported to not have an interest in the meeting (RFG NW 7a).
- Poor group renewal: long-term members who contribute more to meetings discourage new members from engaging (RFG SW 7efg).

The RFG teams also visit ports and fishing locations in person (i.e. drop-in sessions) encouraging one-to-one conversations with fishers. A trial of inter-session work³ was run in the south-east 4c in March 2022, which provided the RFG team with the opportunity to meet directly with fishers who were unable or unwilling to attend formal meetings (MMO 2022a). The drop-in sessions aim at engaging with a wider audience of fishers and industry professionals, conducting

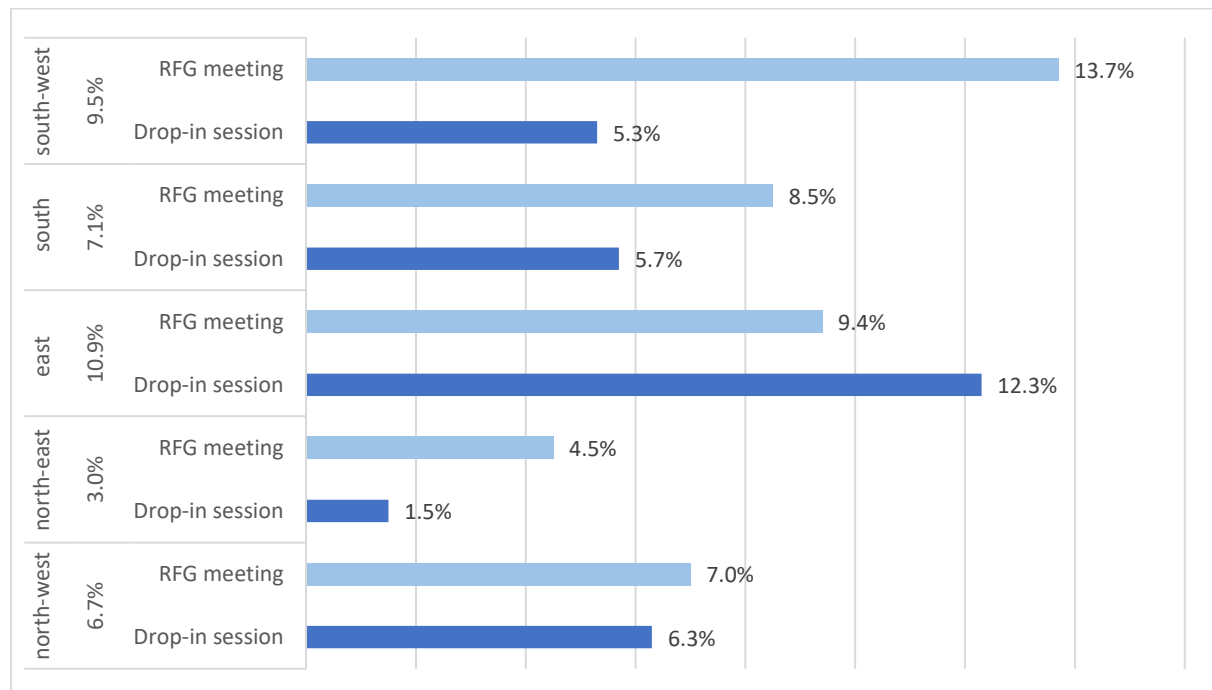
² The Newsletters have been published since autumn 2022. Since summer 2023, MMO has published region-specific newsletters.

³ Inter-session work has a face-to-face nature and provides RGF teams with opportunity chance to explore local challenges and opportunities. Inter-session work is planned to be undertaken in each area on a yearly basis.

in situ observation to identify opportunities and problems, and promoting ongoing work and activities (*Ibidem*). The MMO (2023a) highlighted the success of in-person engagement in the consultation process on the sustainability of the Lyme Bay Dover sole fishery. On that occasion the RFG team was successful in encouraging a substantial number of those invited to take part in the consultation by discussing it in person with stakeholders in ports and by offering to fill in the consultation offline with them. On an *ad-hoc* basis, the RFG teams also join the Marine Enforcement Officers (MEOs) or other teams in coastal visits. These visits provide the MMO with the possibility to engage with local fishers, by forming positive working relationships, and following up on actions raised in meetings or drop-in sessions (MMO 2022a).

An analysis of the data shared by the MMO for drop-in sessions and RFG meetings (n=96 in total) over the period April 2021-November 2023 shows that attendance rates vary across regions and, to a lesser extent, across months. As shown in Figure 1, the north-east region recorded the lowest attendance rate (3% of those invited in that region attended, average from RFG meetings and drop-in sessions), while the east region saw the highest attendance rate (10% of those invited in that region attended, average from RFG meetings and drop-in sessions). Additionally, the figure shows that across all the regions, except for the east region, attendance is higher for RFG meetings compared to drop-in sessions. However, it is not possible to assess if this difference is associated with the type of meeting (RFG meetings *versus* drop-in sessions) or its modality (virtual *versus* face-to-face), as all the drop-in sessions are face-to-face, and all the RFG meetings are online.

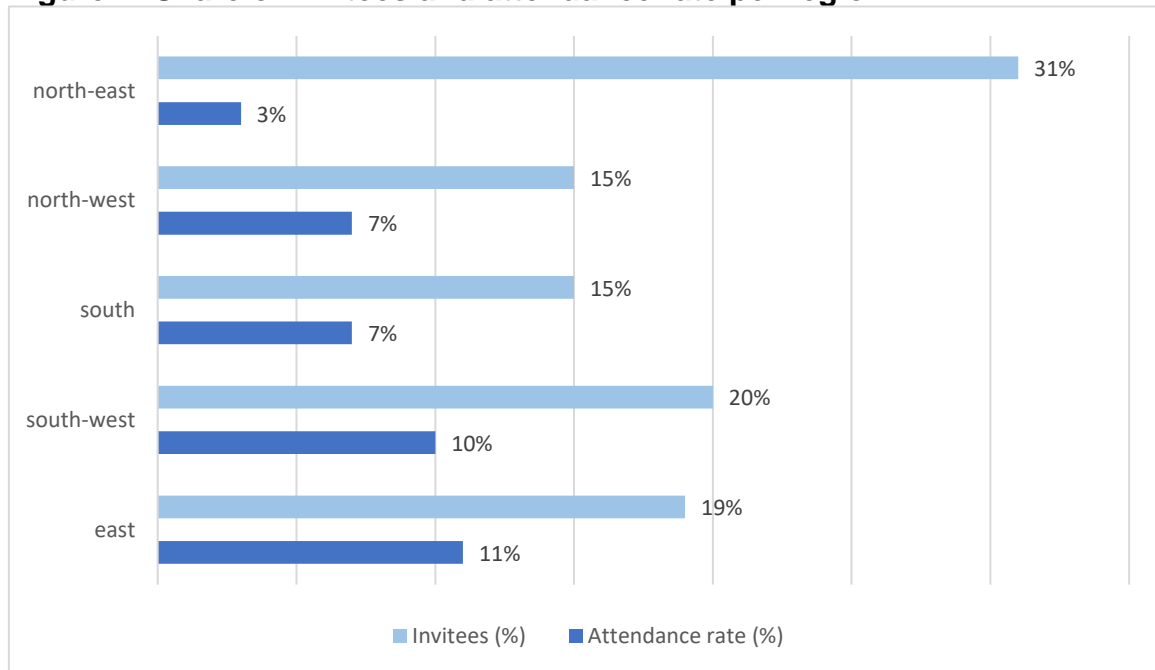
Figure 1: Attendance rate by region and type of meeting (drop-in sessions versus RFG meetings with averages).



(Source: MMO's data)

A review of the data comparing the number of invitees and the attendance rate indicates there is no obvious association between the two; for instance, in the south and north-west regions there is a lower percentage of invitees (of all invitees across all regions) and a lower attendance rate, while in the north-east region there is a higher percentage of people invited and a low attendance rate (Figure 2).

Figure 2: Share of invitees and attendance rate per region.



(Source: MMO's data)

The data provide a baseline that can be used to compare future attendance and help assess the impact of solutions aimed at increasing attendance.

1.3 Study rationale

The aim of this study is to collect information about the barriers and facilitators to engagement and propose solutions to the challenges identified. The research has been informed by ICF's Integrated Model of Behaviour (Barnard, 2023). The model combines theories along the whole of the behaviour change pathway, from those related to core motivational drivers through the process of making choices in the face of limited time, energy and resources, to models that illuminate the challenges of implementing a behaviour.

The behavioural model combines both economic and psychological approaches and provides a comprehensive framework to understand fisher behaviour to facilitate behaviour change. For this exercise, the focus is on psychology of behaviour change. It helped the study team to identify fishers' participation barriers that ranged along the whole length of the behavioural pathway, from "motivation" to "choice", "execution" and "outcomes and feedback", and it enables the identification of practical solutions that can be implemented within real-world contexts. More detail about the model is included in Section 2.1.

2. Methodology

To understand fisher engagement needs and the barriers to engagement, ICF adopted a two-stage approach:

- The first stage involved identifying and reviewing relevant material from the MMO and the wider literature (see Reference section).
- The second stage involved gathering primary data to build on the evidence collected via the desk research.

The aim of the first stage was to collect information on the MMO engagement process and its outcomes, and to review approaches to increase stakeholder participation.

The second stage involved the study team conducting n=9 interviews with: fisher representatives (n=3 fisher representatives, and n=1 producer organisation), a recreational fisher (n=1) and MMO staff (n=4) to explore fisher engagement needs and barriers. The topic guides are reported in Annex 1.

The study team joined an MMO Fisheries Management Plan (FMP) consultation meeting held on 4 December 2023 in Shoreham-by-Sea, with the aim to approach fishers to interview. Although only one fisher agreed to be interviewed, the meeting also provided the study team with the opportunity to observe an example of the meeting dynamics and the interaction between the MMO and stakeholders.

The data collected via the desk and primary research were analysed and solutions were proposed to address the identified barriers. The data analysis and the solutions identification were conducted by applying the Integrated Model of Behaviour (Barnard 2023). A brief introduction to this approach is presented in Section 2.1.

Originally, ICF proposed a trial phase, to test and refine one of the solutions proposed during one of RFG meetings. Due to logistical reasons, the test and trial phase was not implemented.

2.1 Behaviour change approach – the integrated model

ICF's Integrated Model of Behaviour (*Ibidem*) integrates psychological and economic approaches to understand behaviour and behaviour change. For this study, the analysis focuses on fisher psychology. Additionally, it extends the existing models to close the 'choice-action' gap and incorporate a feedback loop.

This new framework focuses on four elements of behaviour: motivation, choice, execution, and outcome (Figure 3).

“Motivation” relates to the conscious and unconscious cognitive processes that direct and inspire behaviour. Motivation can relate to deep-seated drives, such as the need for safety and security, or more relational and higher-level needs, such as love and belonging, self-esteem and ‘self-actualisation’. Motivation can also be influenced by rewards and punishments (that create conditioned behaviour and habits), and cognitive structures expressed as attitudes, values and behavioural scripts that provide a framework for thinking about needs and motivation.

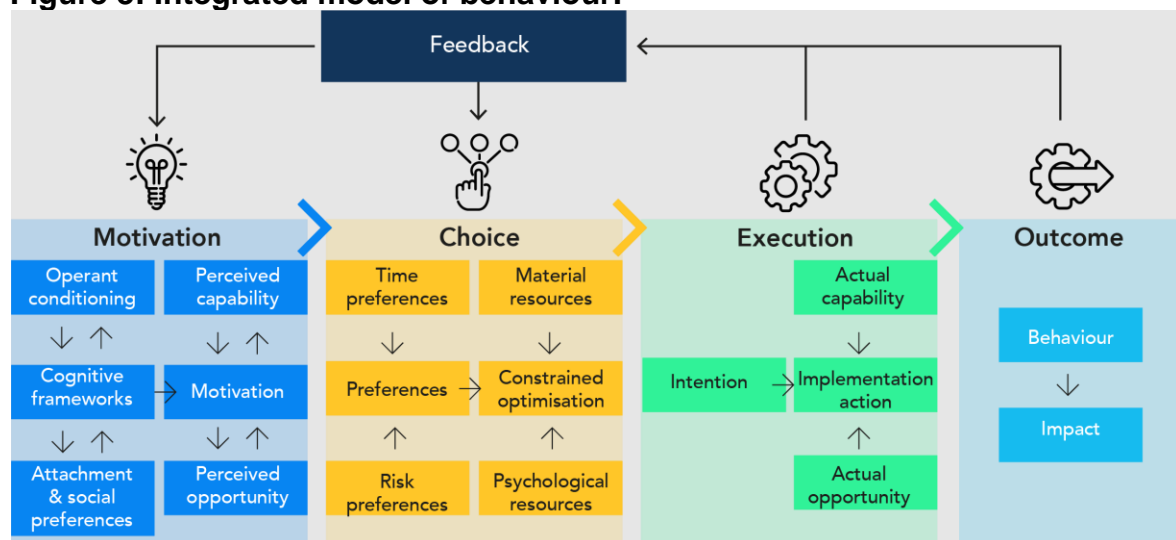
“Choice” is the element of the model that focuses on the options available to people and the process of how they choose which options to select. It recognises the fact that people may be motivated to undertake a range of behaviours, but that individuals’ options are limited by their material and psychological resources meaning they cannot always do everything they wish to. Choices are also influenced by people’s attitudes to risk and the degree to which they are willing to delay rewards.

Sometimes undertaking a behaviour (“Execution”) is straightforward, but at other times there is a substantial process involved in carrying out a choice and often this is influenced by an individual’s opportunity and capability. Opportunity encompasses all the things that lie outside an individual’s direct control (e.g. physical proximity to a meeting venue provides people with the opportunity to attend that meeting). Capability on the other hand refers to an individual’s capacity to act (e.g. knowledge, skills or physical ability to attend a meeting).

There are two parts to the outcome of any behaviour. The first is the experience of the behaviour itself: what it feels like to do it physically and emotionally. The second is the impact of the behaviour. Behaviour is often goal-directed, meaning that it is not the behaviour itself that is ultimately of interest but the result of the behaviour. Both these aspects of the “Outcome” can feed back into someone’s choices and ultimately their motivation, reducing or increasing the likelihood that they will repeat the behaviour.

The “Feedback” links the outcome and the execution elements, to the motivation and choice elements, explaining change in behaviour over time and providing an explicit pathway indicating how outcomes can influence motivation and choices.

Figure 3: Integrated model of behaviour.



3. Findings and suggested solutions

This section presents the barriers identified during the desk and primary research, and proposed solutions. Despite the limited number of interviews (9)

conducted, the findings revealed consistency in the barriers reported by the interviewees.

In this section the barriers and the solutions are organised around the four elements of behaviour reported above (i.e. motivation, choice, execution, and outcome).

A summary of the barriers identified is presented in Figure 4. Additionally, a summary presenting the source of each of the barriers and proposed solutions is given in Table 2.

Figure 4: Summary of the barriers identified.

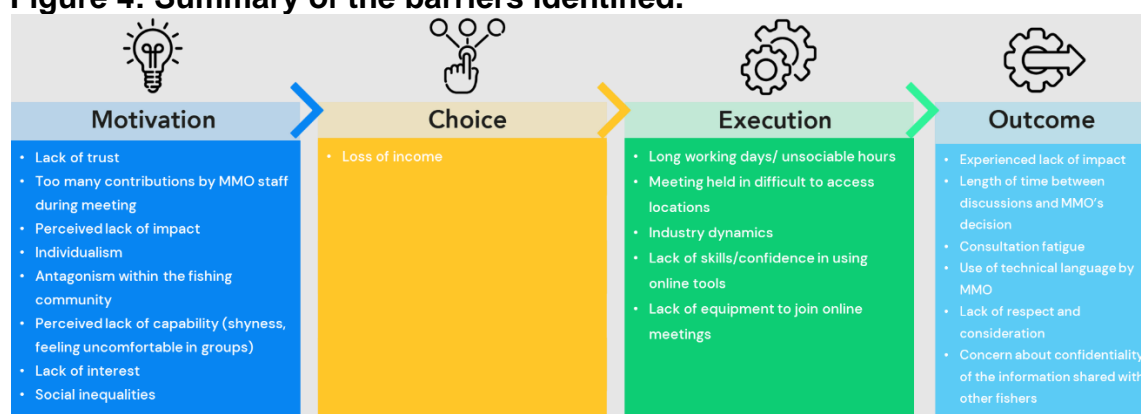


Table 2: Barriers, source of information and proposed solutions and/or actions.

Element of behaviour	Barriers	Source/s	Proposed solutions/action
Motivation	Mistrust	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives • Interviews with fisher 	<ul style="list-style-type: none"> • Trust-building campaign • Paid ambassadors/ champions • Additional training for MMO staff • Targeted agendas • Highlighting main goal of meetings • Emails from named individuals • Sequential, mixed-mode administration of invitations
	Perception that input will not influence decisions	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives 	
	Conflict and antagonism within fisher communities	<ul style="list-style-type: none"> • Desk research 	
	Individualism	<ul style="list-style-type: none"> • Desk research 	
	Perceived lack of capability (feeling uncomfortable in groups, shyness)	<ul style="list-style-type: none"> • Desk research 	
	Perceived lack of skills to engage	<ul style="list-style-type: none"> • Desk research 	

	Social inequalities (age, gender, educational background)	<ul style="list-style-type: none"> • Desk research 	
	Lack of interest and perceived irrelevance of the discussion	<ul style="list-style-type: none"> • Interviews with fisher representatives 	
	Too many contributions from MMO staff	<ul style="list-style-type: none"> • Interviews with fisher representatives 	
Choice	Loss of income due to attending meeting rather than fishing	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives • Interviews with MMO staff 	<ul style="list-style-type: none"> • Offering financial incentives • Paid ambassadors/champions • Piggyback on other events • Provide additional benefits of attending meetings (e.g. VAT advice)
Execution	Long working days/ unsocial hours	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives • Interviews with MMO staff 	<ul style="list-style-type: none"> • Additional research to understand prevalence of barriers
	Meetings held in difficult-to-access locations	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives • Interviews with MMO staff 	
	Not organised/dynamic fisher representative organisations	<ul style="list-style-type: none"> • Interviews with MMO staff 	
	Lack of confidence/skills in using online tools	<ul style="list-style-type: none"> • Desk research • Interviews with MMO staff 	
	Lack of equipment to join online meetings	<ul style="list-style-type: none"> • Desk research • Interviews with MMO staff 	
	Experience of input not	<ul style="list-style-type: none"> • Desk research 	

Outcome and feedback	influencing decisions	<ul style="list-style-type: none"> • Interviews with fisher representatives • Interviews with MMO staff 	<ul style="list-style-type: none"> • Additional research to understand the extent to which widespread concerns are influenced by meeting experiences. • Additional training for MMO staff • MMO responding to fisher suggestions with meaningful actions • Providing timelines of decisions connected to consultation • Enhanced communication of “<i>you said, we did</i>” messages • Reduce number of meetings and/or engagement events
	Length of time between discussions and decisions	<ul style="list-style-type: none"> • Interviews with fisher representatives • Interviews with MMO staff 	
	Consultation fatigue	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives 	
	Use of technical language by MMO	<ul style="list-style-type: none"> • Desk research • Interviews with fisher representatives 	
	Lack of respect/ being ignored	<ul style="list-style-type: none"> • Desk research 	
	Fishers’ concerns about confidentiality	<ul style="list-style-type: none"> • Interviews with fisher representatives 	

3.1 Motivation

3.1.1 Barriers

Barriers to engagement are wide and can be institutional, social and individual in nature. Among fishers there is high-level and long-term mistrust towards government that impacts participation and cooperation, and that is based on the perceived lack of accountability in decision-making (MMO Problem Analysis Paper n.d.). Two of the sources reviewed (Ford and Steward 2021, Reed et al. 2020) reported that fishers do not trust the competencies and knowledge of governmental and enforcing bodies (such as the MMO) and they reported not having faith that they will implement the measures in a “responsible way”. Some fishers might feel that governmental bodies do not consider fishers’ interest and reported a total lack of faith in their good intention (Dixon et al. 2024), as well as the fear that their information will be used by enforcing bodies for compliance purposes (MMO 2024, Calderwood et al. 2021, Orr, et al., 2020) or for the implementation of stricter conservation measures that prevent fishing (MMO 2024, Calderwood et al. 2021).

Armstrong et al. (2013) analysed the experiences from the UK Fisheries Science Partnership (FSP). They reported that before the implementation of this partnership, the relationship between science and fishers was characterised by

mistrust and hostility, which coupled with a remote and unresponsive management, created a dysfunctional system.

The surveys conducted by Ford and Steward (2021) and Dixon et al. (2024) revealed that some fishers trust some organisations more highly (i.e. Cefas and the IFCAs), which are the result of the organisations' participation strategies and increases in feelings of empowerment by stakeholders due to repeated positive interactions.

Korda et al. (2021) in studying the low attendance rate in fisheries focus groups, reported that one barrier to engagement is fishers' belief that attending meetings and discussions would not make any difference to any decisions, suggesting a lack of faith that their participation will translate into tangible outcomes. This was reiterated by the representatives of the fishing community during the interviews. They highlighted that fishers often refrain from participating in government consultations due to the belief that decisions are pre-determined and because they lack confidence in the government's commitment to implement their requests. Interviewees from the MMO acknowledged this and recognised that fishers often feel their contributions are overlooked, though the amount of trust in the MMO was seen as varying across regions in England.

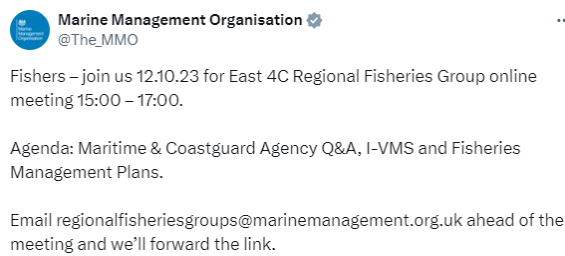
Locally, conflict and mistrust within fishing communities, including antagonism towards their fisheries association, inhibited fishers' attendance at the focus group discussions (MMO 2024, Korda et al. 2021). Furthermore, differing opinions, differences in culture and mistrust present barriers to cooperation among stakeholders - such as fishers, non-governmental organisations (NGOs) (Padda, 2019, Hogg et al, 2017 cited in Ford and Stewart, 2017). The existence of conflicts within the fishing industry was outlined as a barrier in many of the papers studied (Padda 2019, MMO Problem Analysis Paper n/d, White, 2015a, Richards et al., 2004). As reported by Padda (2019) and Richards et al. (2004) trust is important not only within the participatory group process, but also between participants and the wider constituencies they represent. However, the fishing community, far from being a unified group, is characterised by divisions at its core, vested interests (MMO 2024), competition for space between fishers (Reed et al., 2020 Padda 2019), internal conflict, and factions – for example between gear and boat types, between part-timers and full-timers, between those who have fishing heritage and those who do not (Padda 2019). In line with this, Lowndes et al. (2001), while analysing the trends in public participation, listed among its drawbacks that issues are *“often captured by particular groups who are not representative of the wider community”* (Lowndes, et al, 2011: pp. 2012-13), and that *“community-based involvement encourages over concentration on relatively trivial issues”* (*Ibidem*: p. 213).

Several of the papers reviewed, as well as the interviews conducted, suggested that there are individual factors that might impact engagement and participation with decision-makers. Msomphora (2015), while investigating Scottish Inshore Fisheries Group participation and satisfaction in the process of developing management plans, found that demographic and business characteristics – such as years of experience, age, education, type of gear, fisheries dependency, etc. can influence stakeholder participation in decision-making processes.

Also, a lack of interest in the item discussed can influence participation. All fisher representatives interviewed reported that some fishers are not interested in joining discussions around items perceived as irrelevant (e.g. information sharing sessions) or where there are too many contributions by MMO staff on a particular brief. This has the potential to adversely affect participation, potentially leading participants to disengage from the discussion. MMO staff felt that there was higher attendance at meetings focussed on topics that impact fishers' daily operation (e.g. highly protected marine areas). Aligned with this, one fisher representative mentioned that a broad discussion on the future management and the sustainability of fishing is not likely to get substantial engagement from fishers. However, in contrast, another fisher representative believed that most of the industry does have a long-term vision of their business and are very mindful of the conservation process and therefore join the MMO's workshops to gain knowledge, for instance about the area and the species available.

Korda et al. (2021) identified "individualism" as a potential barrier (individualism meaning in this context a focus on someone's individual concerns rather than a 'collectivist' identity, which places greater emphasis on group outcomes), alongside the fact that some individuals may be uncomfortable in meetings. The authors report that these two elements might be linked and that discomfort in meetings can relate to fishers' individualistic approach, which undermines their willingness to be together as a group. This sentiment, coupled with the lack of personal motive, can be reinforced by the way invitations are made, as a review of the invitations as part of the current study indicates that the MMO uses a generic format rather than a personalised one (Figure 5).

Figure 5: Example invitation to RFG meeting.



(Source: the MMO twitter account)

Motivation can also be influenced – positively or negatively – by people’s perception of their ability to participate in an activity (perceived capability) and the perceived opportunities for taking part. Attendance at meetings can be negatively affected by fishers’ long working days and their “*unsociable hours – so were going to bed early — even in the afternoon*” (Korda et al., 2021, p. 9) (i.e. they go to sleep early, even in the afternoon). In relation to the perceived ability, Korda et al. (2021) mentioned that shyness could reinforce the perceived lack of capability to engage. In addition, there were suggestions that people’s ability to participate can be negatively impacted by social inequalities due to age, gender and educational background (Padda 2019, Richards et al., 2004).

3.1.2 Potential solutions

There was widespread recognition that historically relationships between the MMO and fishers has been challenging and that this has resulted in a legacy of mistrust in government and the MMO. This mistrust is seen as undermining fishers’ willingness to support the MMO’s initiatives. Although it should be noted that fishers do not necessarily need to feel positively about the MMO in order to be willing to take part in its consultation exercises, a lack of trust in the MMO can reinforce the perception that taking part in consultation exercises is not worth the effort if fishers’ views are not considered anyway. Added to this, the individualistic

nature of some fishers means that they are unlikely to take part in consultations for pro-social motivations.

To address these challenges, ICF has suggested both a ‘universal’ solution and targeted ones:

- Building trust in the MMO (universal solution).
- Building trust in the consultation process (universal solution).
- Coordination to make consultations more efficient (targeted solution).
- Focus on the individual and individually meaningful issues (targeted solution).

Universal solutions: Building trust in the MMO

Increased consultation through mechanisms such as the RFGs reflect the MMO’s commitment to “*proactively seek, value and use feedback from stakeholders to help shape and improve*” its services (MMO 2020). However, the evidence indicates that many fishers are not aware or convinced that this represents a substantive change from the MMO’s historic approach. Therefore, the MMO could consider investing in a trust-building campaign that aims to change perceptions of the organisation. This might involve advertising and marketing campaigns as well as small-scale events with a focus on changing perceptions of the MMO rather than being aimed at achieving a particular short-term objective. There are many examples of private organisations that have done this successfully (such as Greggs, Starbucks and MacDonalDs). There are fewer examples of public services organisations having done this, however the National Lottery in the UK (Box 1) and UPS in America are cited as examples of successful repositioning/ revitalisation.

Box 1: The National Lottery experience (Ritson 2021).

The National Lottery undertook a repositioning exercise in 2017 in response to shrinking ticket sales and a decline in positive public perceptions. An analysis of its communication approach indicated that it was primarily investing in advertising that focused on short-term goals, such as boosting sales of particular products, rather than long-term brand building. In addition, it had moved away from its original strategy of a dual focus on personal gain and the social benefits of the National Lottery’s investment in good causes. Instead, it solely focused on the chance of winning a large cash prize. In response, the National Lottery’s operator, Camelot, increased its investment in building its brand and emphasised its core aim of contributing to society. Since then, positive perceptions of the National Lottery have increased and the decline in ticket sales has been reversed: sales are now growing year on year.

In terms of designing a campaign, a popular model developed in the 1950s but still used today is the Yale approach to communication and persuasion (Belch and Belch 2021). This approach focuses on the nature of the message being communicated, the source of the message or communicator and the audience of the message. Important factors highlighted within the approach that increase the persuasiveness of communication are: perceiving that the communicator is an expert or has high credibility; the communicator being seen as popular and

attractive; the use of a powerful linguistic style; and, in some circumstances, the arousal of fear (though this can also be counterproductive). On the other hand, a perception that a message is deliberately manipulative reduces the communication's perceptiveness. A distinction is often made between communication that focuses on facts *versus* emotion. The evidence indicates that the most effective strategy is to match the approach to the nature of the issue or attitude. In other words, if the issue is related to what the audience 'thinks' about something, a facts-based approach will be most effective, whereas if it is primarily related to how the audience 'feels' about something, the message should be emotive (Edwards 1990).

Box 2: Example of effective messaging to build trust (Fishing into the Future).

Fishing into the Future campaign describes itself as a UK-wide charity that aims to promote sustainable, prosperous UK fisheries. On its 'About' page it has a promotional video called 'Sean Dennison's Story', which illustrates some of the principles discussed above. The video, which lasts 4 minutes 10 seconds, focuses on the experiences and motivations of Sean Dennison, a fisher and member of the charity. The video uses a story-telling format that has a strong emotive content, communicated through high quality images of Sean at work on his small fishing boat against the backdrop of attractive and evocative coastal scenery. Sean has credibility and expertise due to his occupation, which is reinforced by the carefully structured and paced script. The message content reflects the organisation's twin emphasis on prosperity and sustainability and balances factual content (Sean's motivations and the aim of the organisation) with an emotion pull (the audience's investment in Sean as an individual, the lifestyle and the landscape). Sean comes across as authentic and therefore the video does not feel deceptive or manipulative.

The MMO has a large number of staff who have regular contact with fishers, often through the MMO coastal offices. That contact is often in the context of checking or enforcing regulation, and it is not surprising therefore that the relationship between the MMO officers and fishers was described as varying from very positive to highly contentious. However, as meetings between an MMO officer and fishers could be seen as a potential opportunity to reinforce the new collaborative ethos, both through explicit communication and implicitly through the officer's manner and behaviour. As a first step towards leveraging this potential, it would be useful to undertake research with frontline staff. By exploring their perceptions of their role and their perspectives on fishers, valuable insights can be gained. These insights could inform training initiatives aimed at both developing a new mindset for interacting with fishers and relationship management skills, in particular conflict management. Furthermore, it is advisable to limit the rotation of staff members possessing advanced relationship management skills. Doing so would optimise the effectiveness of training initiatives and foster the cultivation of trusting relationships with fishers.

Universal solutions: Building trust in the consultation process

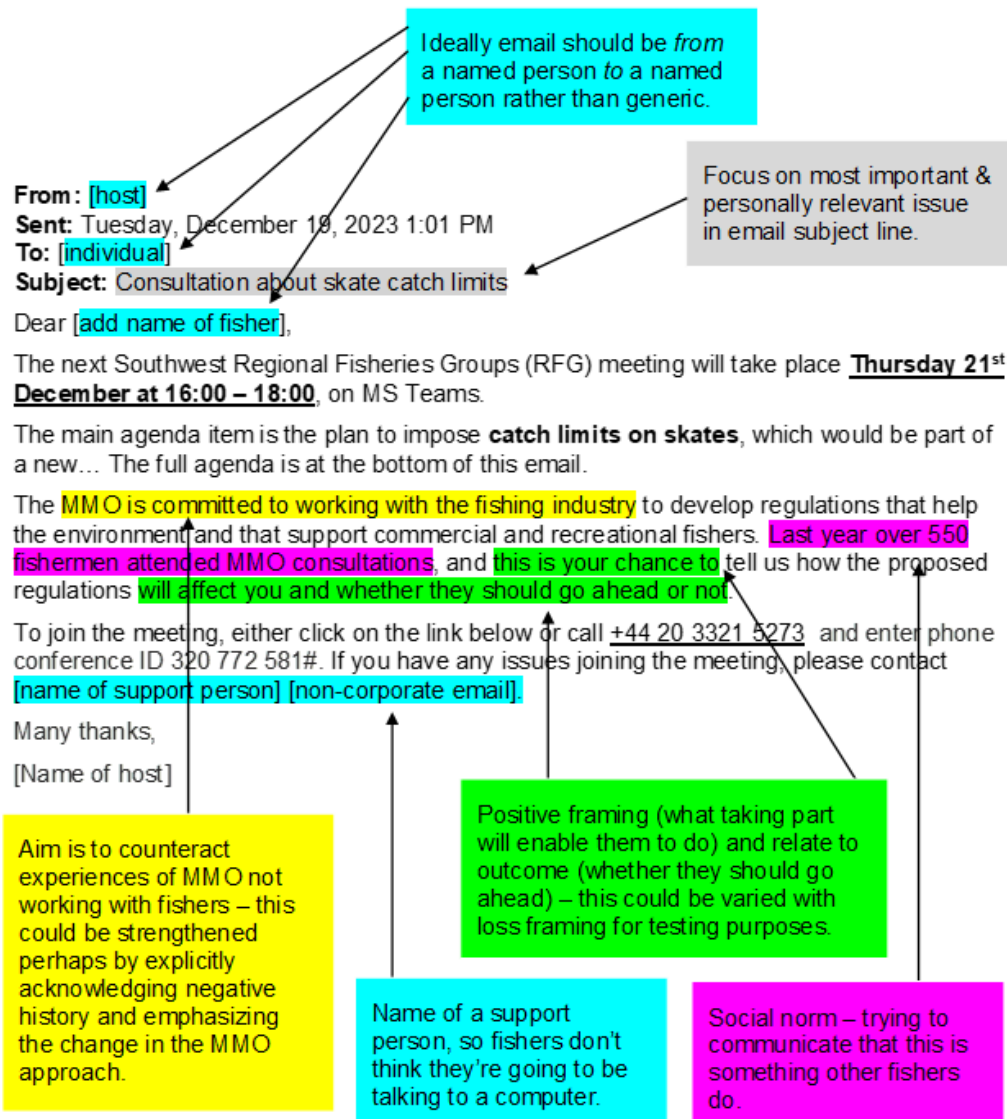
Within the broader aim of increasing fishers' general trust in the MMO, is the more specific requirement to convince them that it is worth attending consultation

events because their views and opinions will influence the outcome of decision-making and make a material difference to their lives. Human behaviour is largely goal-directed and motivation is undermined if an individual does not believe there is a realistic chance of the reward being achieved, particularly if it requires a degree of delayed gratification (Sapolsky 2017), which is very much the situation in the case of taking part in consultation exercises. The influence of the availability heuristic (Dale 2015) is important in this context, it leads to individuals evaluating the likelihood of an event occurring based on the most recent or memorable examples. This means that a single, memorable example of the MMO not responding to the concerns of fishers is likely to inform a global assumption about the organisation's approach. Therefore, one approach the trust-building campaign could take is to focus on an example where the MMO was able to respond to fishers' concerns, communicated in a vivid manner so that it becomes the example that is most easily brought to mind and therefore counteracts the assumption that taking part in a consultation will have no impact.

Targeted solutions: Focus on the individual and individually meaningful issues

Fishers were described as individualistic, which implies an emphasis on autonomy, personal achievement and gain, and the needs and rights of the individual (as opposed to collectivism that focuses more on harmony, interdependence and conformity) (Sapolsky 2017). Given this characteristic, focussing consultations on issues that are meaningful to fishers individually rather than having a wider industry or community benefit is likely to encourage greater engagement. This would involve targeting the agenda of a meeting to those issues that are personally relevant to fishers and removing less relevant issues. It would also involve highlighting the main goal of a meeting in communication and invitations, rather than generic issues. Additional elements that reflect the importance of an individualist approach and could encourage participation include making sure emails are sent from a named individual with a personal email address (rather than corporate one) and are sent and addressed to individuals rather than a mass communication (i.e. avoid "Dear all" emails). It may also be worth experimenting with sequential mixed-mode administration of invitations (in other words, following up an email invitation with a phone call). Though this is obviously a resource-intensive approach, it emphasises the importance of individual fishers. An example of an amended invitation is presented in Figure 6.

Figure 6: Example of amended invitation.



Targeted solutions: Coordination to make consultations more efficient

Consultation fatigue was cited in the literature and primary research as an issue that was undermining engagement in consultation events. Research indicates that a positive response to an event is strongly influenced by expectation, which means that habituation will tend to undermine any perception of 'reward' and reduce motivation. This means that even if fishers are motivated to attend consultation events and feel that they get a positive outcome from them, if they happen too frequently their motivation to attend will reduce over time. One solution to this is to rationalise the number of consultation events run by the MMO and associated organisations (such as Cefas), combining them whenever possible. However, an implication of this is that it may require that the consultation exercises are rationed, so that the issues that are most important and individually relevant to fishers are prioritised.

3.2 Choice

3.2.1 Barriers

Findings from the literature and the interviews suggested that economic factors negatively impact fishers' participation in MMO meetings. Participation in MMO meetings which clash with fishing activities can translate into a loss of income, as reported by fisher representatives and MMO staff during the interviews. This aligned with the findings of the desk research. Fishers need to fish (FishFocus 2023), Reed et al. (2020) and Padda (2019) reported that their capacity to engage with policy processes is limited, especially if the activities are held away from harbours or at times that clash with their business activities. Korda et al. (2021) and MMO (2024) reported that fishers often make the active choice not to attend meetings due to potential loss of income, as meetings might occur at the time they need to be at sea. Orr et al. (2020) reported that during the Scottish Inshore Fisheries Integrated Data Systems (SIFIDS) Project, some fishers commented that they were expected to help without compensation for their time or effort, despite this impacting their businesses. The authors found that the offer of a small incentive or voucher might well have significantly increased the number of participants. This is aligned with Calderwood et al. (2021) reporting that incentive or reward is most likely required to encourage participation. These rewards and incentives can be of a different nature (e.g. extended fishing season, additional quota, etc.), but they need to be sufficient to outweigh the time and burden of providing information (*Ibidem*). The authors also reported that economic benefits do not always provide the incentive to share information.

In related work, Nicolaas et al. (2019) found that incentives can increase participation and retention rates of hard-to-reach groups in longitudinal research studies. There is further evidence showing incentives can be used to increase the participation of population sub-groups that are often under-represented in surveys. This could suggest that providing fishers with incentives could increase the participation rate. However, a financial reward system might not be the solution to strengthen long-term engagement as "*incentives increase response rates mainly by reducing refusal rates rather than facilitating contact*" (Nicolaas et al. 2019: p. 8). The authors reported that "*numerous experiments have demonstrated that pre-paid incentives have a greater impact on response rates than promised incentives which are conditional on cooperation*" (*Ibidem*: p. 11). This could raise questions about the proactive engagement of participants when joining events under this incentive modality. There is no clarity on the long-term consequences of using incentives for hard-to reach respondents, who may decide to join a study only for the incentives and would lack any other motivation if these were withdrawn (*Ibidem*). However, it should be noted that incentives for surveys tend to be small and do not aim to replace lost income. In contrast, Fishing into the Future provides financial support that does aim to cover lost income for fishers to attend its Fisheries Resource Education Programme (F-REP), though there is no data currently available to indicate the impact of the financial support.

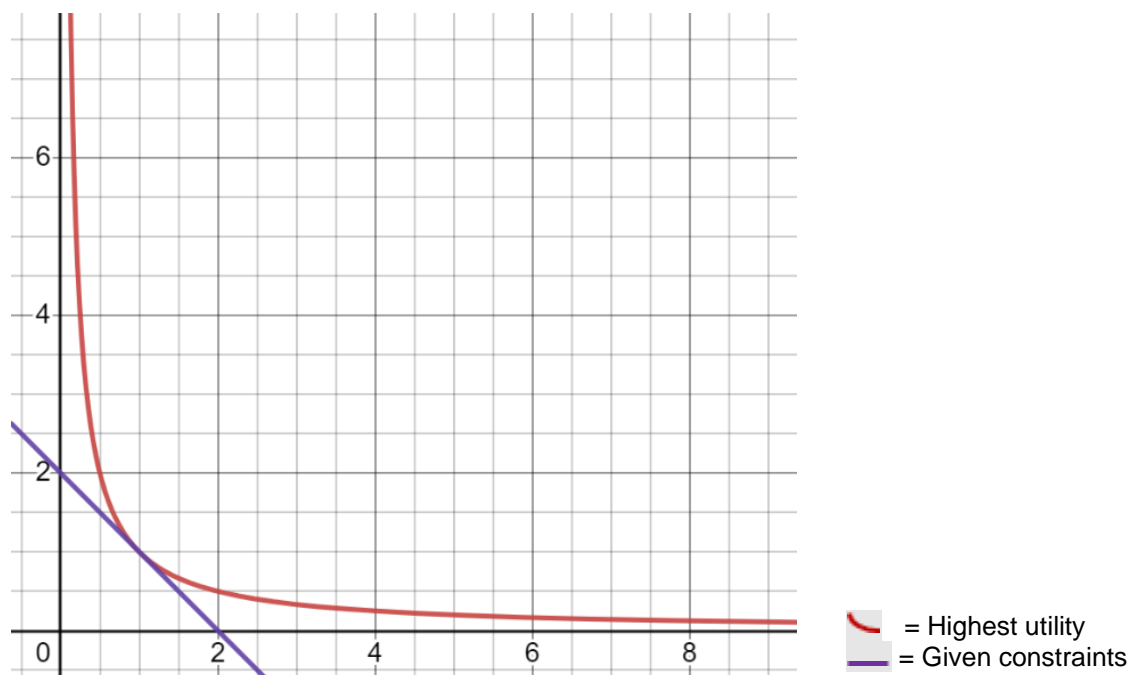
Timing was reported to be an important factor contributing to fishers' non-attendance. The MMO staff and fisher representatives interviewed, highlighted

that fishing is highly dependent on the weather and tides and attendance at the MMO event was felt to be higher when there are adverse weather conditions as some fishers (i.e. inshore fleet - U10m vessels) are not able to go out to sea.

3.2.2 Potential solutions

Participating in consultation events could result in a loss of income for fishers if the events take place during times when they could be at sea. This means that even if fishers are motivated to take part in a consultation, they might have to choose between taking part and fishing. In economics, the process of choosing between a range of options to maximise one's benefit (utility) when one has limited resources (such as limited time) is called "constrained optimisation" (Mas-Colell 1995) (Figure 7). This involves selecting the combination of goods or activities that achieve the highest utility (represented by the red indifference curve in the figure below) given the constraints (represented by the straight purple line in the figure).

Figure 7: Constrained optimisation.



(Source: Barnard, 2023)

One way of changing someone's choice is to change the relative value they place on the goods or activities, which would mean shifting the red indifference curve. This is what the solutions discussed in the section above focused on influencing motivation were aiming to do. The alternative is to change the costs and benefits of the different options, which would mean changing the angle of the purple line or shifting it outwards.

One way of encouraging fishers to choose to attend consultation events would be to provide them with meaningful financial incentives, so that they are partly or fully compensated for their potential loss of income. As noted earlier, this is the approach taken by Fishing into the Future to encourage attendance at its F-REP,

a three-day residential event. The organisation offers financial support per person plus funds to cover meals, travel and accommodation (Fishingporthole.co.uk, n.d.). However, it should be noted that there is no data indicating how effective this approach is. There are also potential downsides to this strategy, including: establishing an unhelpful norm; undermining attendance at other MMO events where fishers are not financially compensated; and skewing who attends consultation events, undermining their representativeness.

An alternative to providing financial incentives to all individuals attending consultation events could be to establish a programme of ‘ambassadors’, ‘advisors’ or ‘champions’ who have a specific role for which they are financially compensated. The role could include attending consultation events, providing additional advice and encouraging other fishers to take part in events. This approach would provide a clear rationale for payment and therefore avoid establishing unhelpful norms. It has been used by organisations, such as the Youth Endowment Foundation which introduced race equity associates to provide inputs on ensuring racial equity in its projects, who are paid £650 per day (YEF, 2023). The establishment of ambassador or advisor roles could also support efforts to increase trust in the MMO as it would signal that the organisation is serious about incorporating the views of fishers in its decision-making. However, given the conflicting nature of some fisher relationships, a potential risk is that an appointed advisor could antagonise the rest of the fishing community. This could be mitigated to some degree by making the roles fixed term rather than indefinite, ensuring that other members of the community have an opportunity to work as an advisor.

Providing financial compensation is a direct way of influencing the cost-benefit calculations that fishers make when deciding whether to attend consultation events. An indirect way of influencing their decision would be to reduce the costs of attending. One example of this has already been used by the MMO, which is ‘piggybacking’ on other events. This involves running consultations as part of events that fishers are already attending, which means that attending a consultation is far less costly as they are already there and so do not additionally miss fishing opportunities. Another way of changing the cost-benefit calculation is to make the consultation events more valuable to fishers (i.e. increasing their benefits). This could be done by providing a service in parallel with the consultation. For example, if fishers struggle with VAT returns or a similar technical issue, part of the consultation event could include information on that subject or even the opportunity to get personal advice. The problem with this is that it can extend the time of a meeting, so one approach would be to include it as an optional ‘clinic’ or advice session, meaning that fishers could decide whether to stay on or not.

3.3 Execution

3.3.1 Barriers

Richards et al. (2004) reported that there is a difference between having the opportunity and having the capacity to participate. To provide fishers with the opportunity to attend meetings does not give them the capacity to participate.

There is a lack of participatory capacity within the fishing sector (MMO 2024) and fishers' capacity and expertise frequently hinders involvement in public discussions (MMO Problem Analysis Paper, n.d.). Aligned with this, a paper reported that "*a general unease related to participation*" (Orr et al., 2020: p.9) affects the likelihood of fisher involvement. White (2015a) notes that fishers might feel intimidated and for this reason be unwilling to contribute (e.g. they might not like to share their thoughts in public as they report feeling silenced, laughed at, etc.).

There are also contextual factors that impact engagement: fishers affiliated to organisations were considered easier to reach, while the non-sector and U10m fleet are more difficult to reach, according to interviews with fisher representatives and the MMO staff. Successful engagement tends to be more prevalent in regions characterised by well-organised and dynamic industry structures, for instance in the south-west. In the north-east, fishers attending meetings are generally older, semi-retired and not used to online tools which may be impacting the success of engagement.

Some fishers might not have the equipment and the skills to access and use online forms, websites or workshops, often seen as complex and time-consuming to navigate. There was a consensus among the MMO staff interviewed that fishers' access and ability to use online tools can impact engagement, though fisher representatives did not mention this. Inshore vessels were seen as particularly difficult to engage from this point of view, with some lacking a laptop. Similarly, older and semi-retired fishers were seen as more often lacking the ability to attend online meetings by the MMO staff and some fisher representative organisations. One fisher representative mentioned that meetings should be face-to-face, while at the same time acknowledging that online engagement might be the only way given the geographical size of the region. The online format seems to also have an impact on fishers' level of satisfaction, which tends to be higher when they attend meetings in-person, and lower in the case of online meetings, according to the MMO staff.

A potential lack of specific skillsets held by fishers was identified by the papers reviewed. In particular "*skills in public speaking, understanding legislative and policy context are often lacking where fishers have spent less time in formal education or working in an office environment*" (MMO Problem Analysis Paper, n/d: pp. 19-20).

The investment in time required can act as a barrier to participation (Orr et al., 2020). For example, Calderwood et al. (2021) reported that fishers explained that they already must spend time completing paperwork regarding their catches and fishing operations, and it can be difficult to find time to invest in additional activities (i.e. information sharing). Similarly, across the interviewees, long workdays at sea were seen as a reason why fishers did not join events: being tired after long working days, fishers do not want to attend meetings and/or travel to join them. The location of meetings was seen as adding another layer of complexity: an interviewee from the MMO mentioned that attendance was generally higher for meetings organised close to major ports, and that fishers get frustrated when meetings are held in remote areas. Also, it was mentioned that some places are hard to reach (e.g. Cornwall, which has accessibility issues

throughout the year due to tourism peaks in summer and adverse weather conditions in winter).

3.3.2 Potential solutions

There are several practical barriers that make it harder for fishers to actually take part in consultation events once they have decided to attend them. These barriers potentially relate to opportunity, including meetings taking place at inconvenient times or locations, and capability, including limits to fishers' capability, such as actual or perceived skill deficits in terms of speaking at meetings or using online tools. Behavioural economics and "Nudge" theory have demonstrated that relatively minor frictions related to both opportunity and capability can have a disproportionate influence on behaviour (Ruggeri 2018). Delay discounting means that people value rewards in the future less than the same rewards in the present, which can cause people to avoid relatively unpleasant activities (which consultations may be perceived as) even if there are substantial rewards in the future (such as a better fishing environment) (Mas-Colell 1995). On top of this, hyperbolic discounting means that even if an individual plans to attend an event, when it comes to the day itself, they want to avoid it more than they had anticipated (Green and Myerson 2004). Alongside this phenomenon, behavioural economics has highlighted the importance of prospect theory, which indicates that potential losses loom larger in people's minds than equivalent gains (Kahneman and Tversky 1979). This further incentivises people to allow relatively minor barriers related to capability and opportunity that increase the cost of an activity, to seem more important than potential benefits.

The EAST framework (Service et al. 2014) was developed by the Behavioural Insights Team (BIT) to provide a framework for applying the insights derived from behavioural economics to policy issues. Within this framework it is recommended that "*If you want to encourage a behaviour, make it Easy, Attractive, Social and Timely (EAST)*" (Ibidem: p. 4). Applying the EAST framework to encourage fishers to engage in consultations, the study team identified a range of potential actions, listed in Table 3.

Table 3: Actions to encourage engagement in consultations based on the EAST framework.

Element of the EAST framework	Actions
Making attending Easy	<ul style="list-style-type: none"> • Ensuring that consultations take place at times and locations convenient to fishers. • Ensuring that joining instructions are clear and straightforward, removing any extraneous material. • Bringing consultations to fishers – gathering views at the quayside rather than asking fishers to come to the MMO events.

Making attending Attractive	<ul style="list-style-type: none"> • Ensuring invitations look inviting in terms of layout, font, and imagery. • Offering refreshments and other benefits of attending. • Loss or gain framing - emphasising the missed opportunity of not attending or the potential benefits of attending.
Drawing on Social norms	<ul style="list-style-type: none"> • Descriptive norms – indicating that many similar people attend consultation events. • Prescriptive – implying that attending consultation events is expected.
Making invitations and consultations Timely	<ul style="list-style-type: none"> • Sending invitations at times when they are most likely to be read. • Holding consultations at times when the issue is pertinent to fishers.

These kinds of interventions would primarily be aimed at fishers who are already motivated and have decided they want to attend consultations. Even for fishers who are motivated to attend, the suggested solutions are likely to have a relatively small impact and very much depend on the particular context in which they are implemented (Mertens et al. 2022). It is also worth noting that the evidence gathered for this study found inconsistent messages about issues such as the most convenient times for holding consultations and whether there were substantial practical barriers to taking part. In addition, during the primary research, the MMO staff indicated that a range of solutions along the lines of those suggested above have already been tested. It would be useful to gather additional insight into the prevalence of these barriers and their consistency across different geographic areas and fisher groups, by undertaking a representative survey or including relevant questions in existing or planned surveys.

3.4 Outcome and feedback

3.4.1 Barriers

As suggested by Msomphora (2015) “*increasing stakeholders' satisfaction in the management process plays a key role in the success of increasing stakeholders' participation in the decision-making process*” (Ibidem: p. 498). The survey of Scottish fishers conducted by Pita et al. (2010) found that despite the fact that fishers felt well informed about management measures, most of them did not feel consulted and involved in the decision-making, suggesting that fishers did not perceive that their engagement led to any outcome.

Korda et al. (2021) highlighted the issue that some fishers believe that participating in a consultation event will not yield meaningful results, undermining their willingness to participate. Several fishers reported experiencing consultation fatigue (Orr et al. 2020, Korda et al. 2021) and voiced their frustration at not seeing tangible results after participating in numerous meetings (Korda et al. 2021, MMO 2024), nor receiving follow-ups on the information provided (MMO 2024). During the interviews it emerged that there is a “*value problem*” that stems

from the absence of immediate outcome and results after fishers have been engaged. One reason for this, according to both the MMO staff and fisher representatives, is that the MMO tends to involve the industry early in the decision-making process, creating a gap between what fishers suggest and any noticeable actions arising from feedback. The result of this is that fishers become frustrated with the process and therefore reluctant to invest their time in the MMO's meetings.

This is aligned with Richards et al. (2004) reporting that "*consultation fatigue arises as people are approached more and more often to participate but perceive little return on the time and energy they give up to do so*" (*Ibidem*: p. 12).

According to fisher representatives, there are language differences between the MMO and fishers which sometimes make it difficult to have effective debate and discussion. This aligned with the literature findings, suggesting that the use of formal or technical language (Richards et al., 2004), the perceived lack of respect, the perception that their knowledge will be ignored by managers (Korda et al. 2021), and that it will remain unheard and/or misunderstood from people who are physically and socially distant (Reed et al. 2020; MMO 2024), are also reported as factors dissuading fishers from engaging with management bodies.

During the interview, it also emerged that the competition among fishers can make them less willing to engage. According to fisher representative organisations, fishers are concerned about confidentiality, and they fear that the information provided to other fishers during the MMO meetings could damage their businesses, leading fishers to be more reserved during meetings.

3.4.2 Potential solutions

Feedback loops can influence attendance at consultation events directly, affecting the likelihood of a fisher attending subsequent consultation events, and indirectly, through those attending events sharing their experiences with other fishers and influencing their future participation. The feedback loop applies to both the experience of the event itself and to the perceived impact of the event, and the research indicated that the MMO faced challenges in both these areas. To address this, ICF has suggested:

- Improving the experience of consultation events.
- Increasing impact of consultation events.

Improving the experience of consultation events

There were reports in the literature and in some of the interviews that the experience of taking part in consultation events was not always positive for fishers. This was related to a perception that the MMO staff sometimes used overly technical or formal language and perceptions of a lack of respect, which in part could stem from the conflicting nature of relationships between some fishers or groups of fishers (for example between commercial and recreational fishers). The evidence gathered for this research does not indicate how common these issues are or whether they are primarily historic, reflecting the legacy of the MMO's interactions before the current engagement strategy. However, given the

complexity of the issues and the levels of distrust among fishers, further training and support in this area for those MMO staff running consultations to enable them to manage hostility and conflict and ensure the meetings are as inclusive as possible may be useful, even if the issues are more perception than reality.

Increasing impact of consultation events

As noted above, a central issue in terms of motivation of fishers was the perception that their input into consultations was not valued or acted upon. This perception could be reinforced by experiences of related organisations (such as Cefas), which is not necessarily seen as a different organisation to the MMO by fishers. There are two issues to consider in addressing this issue. The first is the substantive issue that the MMO needs to be transparent about how it has responded to fishers input; if there are issues that the MMO is not able to change its position on irrespective of fishers' views, it is important that the organisation does not 'consult' on those issues, otherwise fishers' perceptions will be reinforced. The second issue is changing fishers' beliefs about the impact of consultations. Personalising "*you said, we did*" feedback, for example through email follow ups after consultation events, may be more effective than more generic feedback in the newsletter, particularly as it is unknown how many fishers read the newsletter. It would be helpful to combine a more personalised approach to feedback with a timeline linked to agenda items, which provides a visual representation of the progression and expected results, thereby addressing participants' concerns about the perceived absence of immediate impact.

4. Conclusions

When setting out its 10-year vision in 2020 the MMO said that it would find new ways of working with its stakeholders and customers, including growing “*more direct relationships with key stakeholders, working together to establish shared objectives and create opportunities for collaboration... [and] will work to deliver in partnership, including joint stewardship and a trusted customer approach*” (MMO 2020: p. 18). This represents a significant ambition, particularly given the challenging nature of the historic relationship between the MMO and fishers that was acknowledged by the MMO itself as well as by fisher organisations.

The RFGs are one way in which the MMO is aiming to increase its engagement with the fishing community. The literature and primary research conducted with the MMO staff and fisher representatives identify a range of barriers to encouraging fishers to engage with the consultation events. These barriers ranged along the whole length of the behavioural pathway, from “motivation” to “choice”, “execution” and “outcomes and feedback”. This implies that there is no quick fix to increasing engagement and that the MMO will need to implement a range of interventions and solutions rather than relying on a single approach.

Using the integrated model of behaviour and drawing on solutions suggested by research participants, literature and behavioural models, examples of approaches used in other contexts, and the research team’s ideas, ICF has suggested a wide range of potential solutions that are targeted at one or more of the barriers.

However, changing behaviour is difficult and whichever solution or solutions the organisation decides to adopt, ICF recommends testing it on them as rigorously as possible, in order to maximise the MMO’s effectiveness and efficiency. Testing the solutions will allow the MMO to find out if they work, and it will offer the opportunity to review and improve some of them, while dropping those that the evidence suggests are not effective.

5. Recommendations

Based on the research conducted for this study, it is recommended that the MMO undertake further research to understand the prevalence of barriers to engagement, implement a range of potential solutions and evaluate robustly any interventions tested.

Specific recommendations include the following:

- Undertake research to understand the attitudes and experiences of front-line staff to fishers and whether they align with the organisation's ethos of collaboration.
- Undertake research to understand the structure and dynamism of MEO teams (how often do they change, what training do people get, what operational support do they get, and what amount of time can they spend on non-enforcement matters?)
- Undertake research through representative surveys of fishers to understand the prevalence of barriers, particularly those related to attending consultation events.
- Implement a set of interventions and solutions to address the barriers identified along the whole behavioural pathway, with high priority solutions being:
 - Increasing general trust in the MMO through communication focused on repositioning.
 - Increasing the belief that taking part in consultation exercises will have an impact through:
 - Ensuring they do have an impact.
 - Communicating the impact effectively.
 - Improving the cost-benefit of taking part in consultations by:
 - Considering an element of financial compensation.
 - Decreasing the cost of taking part by 'piggybacking' on other events.
 - Increasing the benefit of taking part by offering additional services, such as VAT advice.
 - Ensuring consultation events are easy to attend and attractive through:
 - Holding them at times and locations that are easy to access and considering 'taking the consultation to the fishers'.
 - Providing refreshments or other small benefits.
 - Making sure invitations are designed with fishers in mind, including making them clear, accessible and behaviourally informed.
- Rigorously test all solutions and build in the expectation that ineffective approaches will be discontinued, and effective ones refined and improved over time.

Reference

Desk research

Armstrong, M J, Payne, A I L, Deas, B., and Catchpole, T L. (2013). Involving stakeholders in the commissioning and implementation of fishery science projects: experiences from the UK Fisheries Science Partnership. *Journal of fish biology*, 83(4), pp: 974-996.

Bishop, P and Davis, G. (2002). Mapping public participation in policy choices. *Australian journal of public administration*, 61(1), pp.14-29.

BIT. (2017). Britain's census matters. Can we boost participation and save money? Available online at: www.bi.team/blogs/britains-census-matters-can-we-boost-participation-and-save-money/ (Accessed 13 September 2023).

Calderwood, J, Haflinger, K, Shigueto, J A, and Mangel, J C. (2021). An evaluation of information sharing schemes to identify what motivates fishers to share catch information. *ICES Journal of Marine Science*, 80(3), pp: 556–577.

Dixon, M, Grilli, G, Stewart, B D, Bark, R H, Ferrini, S. (2024). The importance of rebuilding trust in fisheries governance in post-Brexit England. *Marine Policy*, 161, pp: 1-12.

Fishing Focus (n.d.). Fishing into the Future relauches residential event. Available online at: fishfocus.co.uk/fishing-into-the-future-relauches-residential-events/. (Accessed 19 September 2023)

Ford, E, and Steward, B D. (2021). Searching for a bridge over troubled waters: An exploratory analysis of trust in United Kingdom fisheries management. *Marine Policy*, 132.

GOV.UK. (2023). Guidance Regional Fisheries Groups. Available online at: www.gov.uk/guidance/regional-fisheries-groups. (Accessed 30 October 2023).

Korda, R, Gray, T, Kirk-Adams, D and Stead, S. (2021). Addressing Low Rates of Attendance Within Fisher Focus Groups: Reflections from Inshore Fisheries Research in England. In *Researching People and the Sea: Methodologies and Traditions*, pp:115-136.

Lowndes, V, Pratchett, L and Stoker, G. (2001). Trends in public participation: part 1-local government perspectives. *Public administration*, 79(1), pp: 205-222.

MMO Problem Analysis and Diagnostic Paper (n.d.). Supporting the Development and Maintenance of Relationships to Achieve Sustainable Fisheries.

Msomphora, M R. (2015). Stakeholder participation and satisfaction in the process of developing management plans: The case of Scottish Inshore Fisheries Groups. *Ocean & Coastal Management*, 116.

Nicolaas, G, Corteen, E, and Davis, B. (2019). The use of incentives to recruit and retain hard-to-get populations in longitudinal studies. Available online at: www.ukri.org/wp-content/uploads/2020/06/ESRC-220311-NatCen-UseOfIncentivesRecruitRetainHardToGetPopulations-200611.pdf.

Orr, K K, McKnight, A, and Logan, K. (2020). Scottish Inshore Fisheries Integrated Data System (SIFIDS): Work Package 7 Final Report: 'Engagement with Inshore Fisheries to Promote and Inform. MASTS. 39pp. Available online at: research-repository.st-andrews.ac.uk/bitstream/handle/10023/23453/WP7%20Final.pdf?sequence=1&isAllowed=y.

Padda, G (2019). We're Just Fishing: Analysing Environmental Justice in The Wash Cockle Fishery. PhD Thesis submission. University of East Anglia

Pita, C, Pierce, G J, and Theodossiou, I. (2010). Stakeholders' participation in the fisheries management decision-making process: Fishers' perceptions of participation. *Marine Policy*, 34(5), pp: 1093-1102.

Price, R A, Quigley, D D, Hargraves, J L, Sorra, J, Becerra-Ornelas, A U, Hays, R D, Cleary, P D, Brown, J and Elliott, M N. (2022). A systematic review of strategies to enhance response rates and representativeness of patient experience surveys. *Medical Care*, 60(12), p: 910.

Reed, M, Courtney, P, Lewis, N, Freeman, R, Chiswell, H, Black, J, Urquhart, J, and Phillipson, J. (2020). Assessing Participation of the Fishing Sectors in England's Science and Management, Draft Final Report to Defra. The Countryside and Community Research Institute: Cheltenham. Available online at: eprints.glos.ac.uk/10042/.

Renn, C, Rees, S, Rees, A, Davies, B F R, Cartwright, A Y, Fanshawe, S, Attrill, M J, Holmes, L A, Sheehan, E V. (2024). Lessons from Lyme Bay (UK) to inform policy, management, and monitoring of Marine Protected Areas, *ICES Journal of Marine Science*, 81(2), pp: 276–292.

Richards, C, Carter, C and Sherlock, K. (2004). Practical approaches to participation. Aberdeen: Macaulay Institute. Available online at: www.researchgate.net/publication/255653601_Practical_Approaches_to_Participation.

White, C S. (2015a). Getting into fishing: recruitment and social resilience in north Norfolk's 'Cromer crab' fishery, UK. *Sociologia Ruralis*, 55(3), pp: 291-308.

White, C S. (2015b). Social resilience, place and identity in the small-scale North Norfolk "Cromer Crab" fishery, UK.

Other sources consulted

APPG. (2020). The Fisheries Act 2020: what you need to know. Available online at: www.fisheriesappg.org/blog/2020/12/16/the-fisheries-act-2020-what-you-need-to-know. (Accessed 27 March 2024).

Barnard, M. (2023). The integrated model of behaviour. Available online at: www.researchgate.net/publication/374675385_The_Integrated_Model_of_Behaviour

Belch, G E, and Belch, M A. (2012). Advertising and promotion: An integrated marketing communications perspective (9th ed.). New York: McGraw-Hill, quoted in Hogg, M A and Vaughan, G M. (2021) Social Psychology. 9th Edition, Prentice Hall, London.

Brookfield, K; Gray, T and Hatchard, J (2005). The Concept of Fisheries Dependent Communities: A Comparative Analysis of Four UK Case Studies: Shetland, Peterhead, North Shields and Lowestoft. Fisheries Research, 72 (1):5569.

Dale, S. (2015). Heuristics and biases: The science of decision-making. Business Information Review, 32(2), 93-99. Available online at: <https://doi.org/10.1177/0266382115592536>

Defra. (2022). Joint Fisheries Statement. Available online at: https://assets.publishing.service.gov.uk/media/637cee048fa8f53f4af6850b/Joint_Fisheries_Statement_JFS_2022_Final.pdf.

Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. Journal of Personality and Social Psychology, 59, 202-216, quoted in Hogg, M A and Vaughan, G M. (2021) Social Psychology. 9th Edition, Prentice Hall, London.

Fishingintothefuture (n.d.). Fishing into the Future. Available online at: www.fishingintothefuture.co.uk/about/. (Accessed 27 March 2024).

Fishingporthote.co.uk (n.d.). The Fisheries Resource Education Programme (F-REP). Available online at: www.fishingporthole.co.uk/f-rep/. (Accessed 27 March 2024).

Green, L, and Myerson, J. (2004). A discounting framework for choice with delayed and probabilistic rewards. Psychological Bulletin, 130 (5): 769–792.

HM Government. (2011). UK Marine Policy Statement. Available online at: assets.publishing.service.gov.uk/media/5a795700ed915d042206795b/pb3654-marine-policy-statement-110316.pdf.

HM Government. (2018). A Green Future: Our 25 Year Plan to Improve the Environment. Available online at: assets.publishing.service.gov.uk/media/5ab3a67840f0b65bb584297e/25-year-environment-plan.pdf.

Kahneman, D, and Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47 (2): 263–291.

Mas-Colell, A, Whinston, M D and Green, J R. (1995). *Microeconomic Theory*. New York: Oxford University Press. P981.

Mertens S, Herberz M, Hahnel U J J, and Brosch T. (2022). The effectiveness of nudging: A meta-analysis of choice architecture interventions across behavioral domains. *Proc Natl Acad Sci U S A*, 4;119(1):e2107346118. Erratum in: *Proc Natl Acad Sci U S A*. May 10;119(19):e2204059119.

MMO. (2020). Our MMO Story – the next ten years. Available online at: https://assets.publishing.service.gov.uk/media/5f104da8e90e07031df4b9c5/mmo_the_next_10_years_web.pdf.

MMO. (2022a). Regional Fisheries Groups. National delivery plan.

MMO. (2022b). UK Sea Fisheries Statistics 2022. Available online at: assets.publishing.service.gov.uk/media/654e277cce0b3a000d491530/UK_Sea_Fisheries_Statistics_2022_101123.pdf

MMO. (2022c). Northwest 7a Handling Plan.

MMO. (2022d). Northeast 4b Handling Plan.

MMO. (2022e). Southeast 4c Handling Plan.

MMO. (2022f). South 7d Handling Plan.

MMO. (2022g). Southwest 7efg Handling Plan.

MMO. (2023). An evidence review of social, economic and environmental impact in the Lyme Bay Dover sole fish. Available online at: assets.publishing.service.gov.uk/media/65005d9d57278000142519d4/MMO1337_Lyme_Bay_Dover_Sole_Fishery_Evidence_Summary.pdf.

MMO. (2024). Developing Network Analysis to Support Participatory Approaches. A report produced for the Marine Management Organisation, MMO Project No: 1341, April 2024, 34pp

Ritson, M. (2021). Follow The National Lottery’s example: Don’t rebrand, revitalise. Available online at: www.marketingweek.com/mark-ritson-national-lottery-dont-rebrand-revitalise/. (Accessed 27 March 2024).

Ruggeri, K. (2018). *Behavioural Insights for Public Policy*. London: Routledge. P340.

Sapolsky, R M. (2017). *Behave: the biology of humans at our best and worst*. New York, New York: Penguin Press.

Service, O, Hallsworth, M, Halpern, D, Algate F, Gallagher, R, Nguyen, S, Ruda, S, Sanders, M, Pelenur, M, Gyani, A, Harper, H, Reinhard, J, and Kirkman, E.

(2014). EAST: Four simple ways to apply behavioural insights. London: Behavioural Insights Team. Available online at: www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/. (Accessed 27 March 2024).

YEF. (2023). Youth Endowment Fund - Race Equity Associates. Available online at: www.evaluation.org.uk/app/uploads/2023/02/YEF-Race-Equity-Associates.pdf. (Accessed 25 March 2024).

Annex 1 Semi-structured interviews: topic guides

A1.1 Topic guides [Fisher representatives]

1. Can you tell us about your organisation? (Prompt: where are you based, which type and how many members do you have, your mission, etc)
2. In the past three years, have you been contacted by MMO in relation to their events?
- If yes, please explain the purpose (Prompt: MMO seek your help in identifying and/or contacting fishers, MMO asked you to join the events, MMO asked you to promote the event, etc..)
3. Have some of your members been invited to participate in one or more MMO's events?
4. Did you get any feedback from your members on the event organisation? (Prompt: the invitation arrived early enough to plan the fishing activities, the event timing was clashing with fishing activities, lack of technical equipment to participate, etc..)
5. Overall, which percentage of fishers invited do you think attend the event/s?
6. Can you think of reasons why fishers choose not to attend those events? (Prompts: feeling uncomfortable, lack of equipment, lack of time, event timing, distrust in MMO, etc..)
7. Have you received any feedback on this regard from your members?
8. Can you think of reasons why fishers choose to attend those events? (Prompt: feeling of making an impact, trust in MMO, relevance of the event, etc..)
9. Have you received any feedback in this regard from your members?
10. Are you aware of any variations in the attendance rate based on the fishers' geographical location?
11. Are you aware of any variation in the attendance rate based on the event timing?
12. Are you aware of any differences in attendance rate based on the season (e.g., winter versus summer)?
13. Based on your experience, what kind/s of fishers typically participate in MMO's events, and which ones are harder-to-reach?
14. In your opinion, what fishers might need to be motivated to join MMO's event?
15. Is there anything else you would like to add?

A1.2 Topic guides [Fishers]

1. Can you please introduce yourself and tell us about your work?
(Prompt: where are you based, where do you fish, for how long have you been in this business, etc)
2. Are you member of any organisation?
 - If yes:
 - 2.a) which one? Why did you decide to affiliate to this organisation?
 - if not:
 - 2.b) is there a reason for that? Please explain
3. Have you ever been invited to participate in a MMO's event?
 - If yes:
 - 3.a) which one/s? *Go to question 4*
 - if not:
 - 3.b) do you know someone that was invited?
 - (if not, finish the interview)
 - (if yes, *Go to question 10*)
4. How far in advance have you received the invitation?
5. Was the time sufficient to organise your work?
6. How were you invited? (Prompt: via email, via my representatives, I learn about the event in local media outlets and I decided to join, via mail, etc)
7. Have you participated in a MMO event?
 - If yes:
 - 7.a) Why did you decide to attend? (Prompt: feeling to contribute, meeting relevance, trust in MMO, good events' timing etc..)
 - 7.b) Have you found the event relevant? If yes/no, please explain
 - 7.c) Have these meetings affected your ability to engage in your fishing activities? If yes/no, please explain
 - If not:
 - 7.d) Why did you decide not to participate in the event? (Prompt: uncomfortable in formal meetings, no trust in MMO, feeling that these meetings are irrelevant, lack of time, etc)
8. Can you share your opinions on these events (timing, location, overall organisation, purpose)?
9. Based on your past experience, do you think you will join the next event?
Please explain
10. Do you have colleagues that participated in MMO's events?
 - if yes:
 - 10.a) Did they tell you why they decided to attend?
 - 10.b) Did they share with you their thoughts about the event?
11. Do you have colleagues that were invited to MMO events and did not join?
 - if yes:
 - 11.a) Did they tell you the reason for that?

12. What could encourage your participation in these events? (Prompt: have fisher representatives more involved, different time, technical equipment, nothing could motivate you)

13. Is there anything else you would like to add?

A1.3 Topic guides [MMO staff]

1. Can you tell us about your role in MMO?
2. Why MMO is so keen in engaging with fishers?
3. What MMO does to engage with fishers?
4. Which type of events MMO organise for engaging with fishers?
5. Can you tell us a bit more about the engagement events' invitees: how/on which basis are they selected?
6. How many engagement events have you/MMO organised in the past 3 years (2021-2022-2023)? Please specify the region/s concerned.
2021: XX events
2022: XX events
2023: XX events
7. Have you approached fishing community representatives?
- if yes please specify the purpose/s (Prompts: to collect information on fishermen's needs, to invite them to the events, to ask them to motivate fishers to join the events, etc) and the outcome/s
8. Usually, how long in advance do you start inviting fishers to the event?
8.a) Do you send reminders close to the events date? If yes, please explain which channels you use
9. Usually, how do you contact invitees? Prompt (via emails, via phone calls, by promoting the events online, by promoting the events locally, via the fisher representatives, etc)
9.a) Have you tested different ways of contacting them? If yes, please explain.
10. What is the typical timing for these events?
10.a) Have you tested different options? If yes, please explain
11. An average what % of invitees join each event?
12. Have you noticed/are you aware of any variation in the attendance rate after the covid-19 outbreak?
13. Have you noticed/are you aware of any variation in the attendance rate based on invitees' geographical location?
14. Have you noticed/are you aware of any variation in the attendance rate based on the event timing?
15. Have you noticed/are you aware any differences in attendance rates between seasons for these events (e.g., winter versus summer)
16. Based on your experience, what kinds of fishers participate in MMO's events, and which ones are harder-to-reach?
17. Have you received/are you aware of any feedback from fishers with regards to the event? If yes, please explain
18. What do you think motivate fishers to participate in MMO's events?

- 18.a) Have you received any direct feedback from fishers on this regard?
18.b) And from the fishing community representatives?
19. What, in your opinion, are the reasons why fishers choose not to participate in a MMO's event?"
19.a) Have you received any direct feedback from fishers on this regard?
19.b) And from the fishing community representatives?
20. Have you tested solutions to build on the motivators and address the challenges you have identified/heard about?
- if yes:
20.a) Which one/s?
20.b) Have you observed any improvement? If yes, please explain
21. Is there anything else you would like to add?