



Perceptions of behavioural interventions to promote the wearing of Personal Floatation Devices (PFDs) by fishers

Final Report

March 2024

Contents

Contents.....	2
Glossary.....	3
Executive Summary.....	4
1. Introduction.....	6
Project aims.....	6
Policy context.....	6
2. Method.....	7
Fisher and stakeholder interviews.....	7
Solution development and refinement.....	14
3. Findings.....	16
PFD use and fisher characteristics.....	16
Perceptions of enforcement campaigns.....	18
Perceptions of community-based campaigns.....	21
Facilitators of PFD use.....	22
Barriers to PFD use.....	23
Other intervention opportunities.....	26
4. Recommended interventions.....	29
Enforcement awareness campaign.....	29
'Myth-busting' campaign.....	32
In-person events to promote understanding of different types of PFDs.....	35
Simplifying regulation webpages.....	38
5. Conclusion and recommended next steps.....	41
Reference list.....	42
Annex 1: Interview topic guides.....	43
Annex 2: Campaigns shown during interviews.....	52
Annex 3: Fisher characteristics.....	57

Glossary

APEASE: A framework designed to evaluate the appropriateness of existing or proposed interventions using the following criteria: Acceptability, Practicability, Effectiveness, Affordability, Side-effects, Equity.

BIT: Behavioural Insights Team.

DfT: Department for Transport.

Community-based campaigns¹: messages designed to encourage the wearing of personal floatation devices, based around highlighting returning safely to family members.

Enforcement-based campaigns: messages highlighting potential enforcement activities which may result from not wearing personal floatation devices.

Fishers: Individuals working in the commercial fishing industry.

Fishers and stakeholders: Fishers and stakeholders interviewed as part of this research project.

MCA: Maritime and Coastguard Agency.

MOB: Man overboard.

NIP: Notice of Intent to Prosecute.

Participants: Fishers and stakeholders interviewed as part of this research project.

PFD: Personal floatation device.

RNLI: Royal National Lifeboat Institution.

Sea survival course: Mandatory course for all new fishers about personal survival techniques when at sea.

¹ This report also refers to “community based interventions” and “enforcement-based interventions”, which is used interchangeably with “campaigns”

Executive Summary

Project context and aims

Wearing a personal floatation device (PFD) can improve the chances of survival at sea. However, compliance with PFD use in commercial fishing across England is thought to be low, despite this being now being a mandatory requirement for fishers.

The purpose of this research project was to gain a deeper understanding of regional differences in fisher's perceptions of interventions to increase PFD use. The interventions explored in this research were enforcement-based interventions, such as emphasising potential enforcement activities for not wearing a PFD, and community-based interventions, such as highlighting the impact of PFD use on fishers' family members. The findings will provide the Department for Transport (DfT) with further evidence of which interventions to increase PFD use could be suitable for further development and implementation at a national scale.

Method

Semi-structured interviews were conducted with 33 fishers and 30 stakeholders across eight ports in England. Stakeholders included a range of individuals working with fishers and in the commercial fishing industry (e.g., port harbour masters, retired fishers, fishing merchants, fishing association representatives). Attitudes towards PFD use, the barriers and facilitators to their use and perceptions of different interventions to increase PFD use were explored. Data were analysed using the framework approach and themes were identified. Following this, potential solutions were proposed by BIT and iteratively refined alongside stakeholders from the DfT and Maritime and Coastguard Agency (MCA), to develop four final intervention recommendations.

Findings

Some findings were consistently reported by participants across ports. In particular, whilst fishers generally had negative views of enforcement campaigns or regulations mandating PFD use, risk of enforcement was commonly stated to be the main reason for PFD compliance. Community-based campaigns had a more mixed reception from both fishers and stakeholders, indicating this may change a minority of fishers' attitudes towards wearing PFDs, but that this is less likely to be effective at increasing PFD use at scale. Other informational campaigns, such as posters which describe different types of PFDs or the lifesaving potential of PFDs, also received mixed responses with some participants suggesting these could be helpful, but that the emphasis should focus on more simple and salient messages. This report also details barriers and facilitators of PFD use.

Solutions

According to the perspectives of the fishers and stakeholders interviewed, emphasising the MCA's enforcement activities by detailing the number of enforcement flights operated and enforcement action taken were thought to be one of the most potentially suitable interventions in encouraging more fishers to wear PFDs. Another intervention considered potentially suitable by the fishers and stakeholders interviewed is tackling commonly held beliefs surrounding PFDs, such as that it is not possible to do certain types of work whilst wearing a PFD. Other potential solution options identified from this research were to offer in-person educational events or to increase knowledge of the rules and regulations about PFD use amongst fishers.

1. Introduction

This section introduces the aims of the project and the policy context.

Project aims

The DfT commissioned BIT to gain a deeper understanding of fishers' perceptions of enforcement-based interventions (e.g., emphasising potential enforcement activities) and community-based interventions (e.g., highlighting that wearing a PFD would help fishers return safely to their families), designed to increase the use of PFDs.

The research objectives were to:

1. Understand fishers' perceptions of enforcement and community-based interventions and how these might differ by rank and region.
2. Explore and propose new interventions to increase PFD use.
3. Use the APEASE framework² to identify the most suitable intervention, or combination of interventions, to be tested in a future trial.

This research was designed to provide DfT with further evidence to inform which interventions to promote PFD use could be suitable for further development and implementation at a national scale.

Policy context

Commercial fishing can be a dangerous occupation. In 2018, the wearing of PFDs in the commercial fishing industry was made mandatory at all times on open deck, unless measures are in place which eliminate the risk of fishers falling overboard.³ Nonetheless, there have continued to be fatalities, with 2021 having the highest number of fatalities in commercial fishing for nearly a decade⁴, primarily from 'man overboard' (MOB) incidents. The foundational part of preventing such fatalities is ensuring PFD use, which could increase in survival rates at sea seven-fold.⁵ However, PFD use in commercial fishing across England is thought to be relatively low.

² The APEASE framework includes the following criteria for assessing interventions: Acceptability, Practicability, Effectiveness, Affordability, Side-effects, Equity.

³https://assets.publishing.service.gov.uk/media/6179565fd3bf7f5601cf3135/MGN_588_Amendment_No.1.pdf

⁴ Marine Accident Investigation Branch (2021). *Annual Report. Marine Accident Recommendations and Statistics*. Southampton: United Kingdom.

⁵ Tipton, et al. (2022). Survival time and search time in water: Past, present and future. *Journal of Thermal Biology*, 110, 103349.

2. Method

This section presents the approach taken to meet the aims of this project. The research primarily involved semi-structured interviews with commercial fishers and broader industry stakeholders. Additionally, two solution workshops were conducted by BIT alongside attendees from DfT and MCA to identify and refine solutions for increasing PFD use among commercial fishers.

Fisher and stakeholder interviews

Sample and recruitment

BIT researchers conducted semi-structured interviews with 33 commercial fishers and 30 broader industry stakeholders.

The interviews primarily took place over 10 (non-consecutive) days of fieldwork across eight ports in England.⁶ These ports were selected by DfT to ensure fisher and stakeholder insights were captured from across different geographical regions in England (refer to Table 1 for the number of interviews per port).

Port visits were conducted in three 'tranches':

- **South-West tranche:** Mevagissey, Looe and Dartmouth (27th November - 1st December 2023).
- **South-East tranche:** Shoreham and Eastbourne (11-12th December 2023) and Whitstable (29th January 2024).
- **North-East tranche:** Whitby and Seahouses (5th February - 7th February 2024).

Two telephone interviews were also conducted with stakeholders who were not available on the day of the port visit.

⁶Interviews were focused only on ports in England, as set out by DfT during the initial scoping of this project.

Table 1: Number of interviews across ports visited.

Port	Fishers interviewed	Stakeholders interviewed
Mevagissey	6	4
Looe	8	6
Dartmouth	1	3
Shoreham	7	3
Eastbourne	3	5
Whitstable	4	2
Whitby	2	5
Seahouses	2	2
Subtotal of interviews	33	30
Total interviews		63

Fishers

To recruit fishers, researchers introduced themselves to fishers at each port. Researchers provided an overview of the project and asked whether the fisher(s) would like to participate in a 'rapid' or 'in-depth' interview. A rapid interview asked fishers for their views about PFD use, or the approval/rejection of an intervention idea, when fishers could participate for between 2 and 15 minutes. An in-depth interview covered the full topic guide (see section on [data collection](#)), lasted between 15-90 minutes and took place in a cafe or other public location.

To encourage participation in interviews, researchers offered (non-financial) incentives to fishers. This involved offering refreshments such as a (non-alcoholic) hot or cold drink (e.g. tea/coffee, soft drink) and a snack (e.g. crisps, biscuits, slice of cake). The rationale for offering these incentives was that these were considered a modest expense for fishers' time. This was not considered by researchers to be coercive, or inappropriately incentivising fishers to take part in this research project, which could result in socially desirable or otherwise biased responses.

At each port, researchers aimed to sample fishers across selected characteristics, to capture a range of views. These characteristics are outlined in Table 2.

Table 2: Sampling criteria for fisher interviews

Characteristic	Sampling criteria per port
Years of experience	A balance between 0-5, 6-10, 10-20, 21+
Role	At least 1 skipper who is also the owner At least 1 skipper who is hired by the boat's owner(s)
Type of vessel	At least 1 under 10 metres At least 1 over 10 metres (if the port caters such vessels)
Type of crew	At least 1 vessel with consistent reliable crew At least 1 vessel with significant seasonal/ad-hoc/inconsistent crew
Experiences with 'man overboard' courses	At least 1 who attended a MOB/sea survival course At least 1 who never attended a MOB/sea survival course

Due to the nature of the approach taken to recruit fishers, this research project did not meet the sampling criteria in each port. Nonetheless, during port visits the sampling criteria of fishers who had been interviewed was monitored by researchers. This helped identify where there were emerging gaps in these characteristics of interest within the sample of fishers interviewed, and to prioritise addressing these gaps in future port visits. Overall, researchers managed to recruit at least one fisher across each of the sampling criteria.

The majority of fishers interviewed were highly experienced (over 20 years of experience), owners or skippers, worked on smaller vessels, and were either single-handers or fishers with consistent crews. The full characteristics of fishers who participated in this research are provided in Annex 3.

Stakeholders

Stakeholders were identified by searching for local fishing networks, such as local fishing associations, harbour offices and regional safety organisations. Some stakeholders were also invited to participate by DfT and MCA using their existing networks.

Most stakeholder interviews were arranged before researchers arrived at each port, using publicly available contact details. Local stakeholders were also approached during each port visit with researchers offering either 'rapid', or 'in-depth' interviews at a suitable time.

The stakeholder participants had a range of backgrounds and fishing experience, and all worked with commercial fishers in some capacity. Table 3 outlines the roles of stakeholder participants.

Table 3: Number of interviews across different types of stakeholders

Role	Stakeholders interviewed
Harbourmaster/Deputy Harbour Master/Marina staff	11
Retired fisher	6
Employee of merchant/fish seller	5
Fishing merchant	2
Fishing association representative	2
Fishery authority representative	1
RNLI employee	2
Fishing watchkeeper	1
Total interviews	30

Data collection

Interviews took approximately 19 hours overall, lasted approximately 18 minutes on average per person, and ranged between 2-90 minutes.

Interview topic guides were developed and used by researchers to conduct the interviews (see [Annex 1](#) for topic guides used by researchers). This allowed researchers to take a consistent approach to eliciting perspectives from fishers and stakeholders across different ports. BIT researchers adapted the questions in the topic guide, when conducting rapid interviews. The following interview questions were prioritised by researchers during rapid interviews, to help focus on feedback regarding interventions encouraging PFD use:

- What do you think would be helpful for fishers to wear PFDs / skippers to encourage their crew to wear PFDs?

- What has worked well to encourage wearing PFDs in the past? What hasn't worked well?
- (When showing an example of a campaign) What do you think about whether this will encourage fishers to wear PFDs?
 - How do you think other fishers will react to these messages?
 - What do you like about these messages?
 - What do you not like about these messages?

Researchers sought verbal or written consent from fishers and stakeholders immediately prior to the interview taking place. Notes were taken during the interview, or immediately afterwards where this was not feasible. Interviews were not audio or video recorded by researchers.

Analysis

Qualitative data was analysed using the 'framework approach' which is widely used in applied social research.⁷ This approach is similar to other thematic analysis approaches and aims to derive meaningful themes and patterns from qualitative data. This approach involves summarising, or 'charting' the data into a thematic framework. This framework was used to capture and triangulate the qualitative data across interviews.

At the end of each port visit, researchers' notes taken during the interviews were documented in a thematic framework (i.e. a structured spreadsheet) for analysis (see Table 4).

Data from interviews were then reviewed and themes identified within the categories of the framework, which included: views on PFD use, responses to enforcement campaigns, responses to community campaigns, and responses to informational interventions or other interventions. These themes were used to identify possible intervention solutions deemed to be most feasible and suitable based on fishers' views and the barriers and facilitators to PFD use which had been identified.

⁷ Ritchie, R; Lewis, J, McNaughton Nicholls, C and Ormston, R. (2014) *Qualitative Research Practice*. Sage: London.

Table 4: Framework used to capture the notes from qualitative interviews. Completed with a fictional example to illustrate the content included.

Role	Responses to community-based interventions	Responses to enforcement interventions	Responses to informational / other interventions	Views on PFD use
Skipper/ Owner 20 years fishing, <10m vessel	Thinks these might work for some people but not many because 'fishers won't care'.	Thinks people are changing because of this- but he and others are 'not happy about it'.	Thinks information needs to be more 'hard hitting' to get fishers' attention.	Wears a PFD when the weather is rough but not otherwise.

Limitations

Qualitative data for this research project was obtained from fishers and stakeholders who were willing to engage in interviews, who were therefore a self-selecting group. This could have introduced bias into the sample, as these participants could have been more interested in, or felt more strongly about, PFDs and PFD interventions than others. Additionally, the ports visited in this project tended to have a relatively smaller fleet of fishers, compared with other ports in the UK. Therefore, there will be views that have not been captured within this project. However, this is reflective of the fact that this is a qualitative piece of research, thereby enabling depth and variety of information sought, rather than breadth or full representation.

Researchers sought to obtain a rich source of in-depth information on the perspectives, experiences, and contexts of fishers and stakeholders to gather detailed insights into the attitudes and behaviours regarding interventions promoting PFD use. These captured the subjective perceptions of campaigns to increase PFD use, which are not objective or quantified metrics about whether these campaigns have increased the wearing of PFDs. Therefore, the findings drawn from interview data should not be interpreted as evidence of the impact of campaigns to encourage PFD use.

Fishers and stakeholders may also have been adapting their responses to reflect the answers they thought the researchers wanted to hear, or due to fear of researchers sharing information on their PFD compliance. However, all participants were reassured that their responses were anonymous, and fishers and stakeholders

provided a wide range of responses, including comfortable admission of low PFD compliance and negative views regarding campaigns.

Solution development and refinement

Following each tranche of port visits, BIT researchers held a meeting with members from DfT and MCA, to outline the emerging findings from interviews with fishers and stakeholders.

After all port visits were complete, two workshops were conducted with DfT and MCA. The goals of these workshops were to share the findings from the analysis of interviews with fishers and stakeholders. Additionally, potential solutions were identified by BIT researchers (based on these findings), which were presented for discussion, in order to jointly review and improve the proposed solutions.

Solutions proposed by BIT researchers were then ranked using the APEASE framework⁸, which considers six different dimensions that are important in selecting and shaping potential interventions (Table 5). This led to a small number of solutions which BIT determined to be most appropriate for the context, feasible and suitable to implement, based on insights gathered from fieldwork and discussions with DfT and the MCA.

⁸ Michie, S., Atkins, L., & West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions*. Great Britain: Silverback Publishing.

Table 5: *The APEASE framework used for evaluating potential intervention ideas.*

Criteria	Description
Acceptability	How acceptable are the interventions to fishers and other stakeholders?
Practicability	Can the interventions be implemented at scale across ports in England given material and human resources?
Effectiveness	How effective are the interventions likely to be at increasing PFD use among fishers?
Affordability	Can the interventions be implemented at scale across ports in England given the costs involved?
Side-effects	Will the interventions lead to other unintended adverse or beneficial outcomes?
Equity	Will all fishers benefit equally from the interventions?

3. Findings

The following section presents the findings from the qualitative research with fishers and stakeholders. The findings are presented under six categories:

1. PFD use and fisher characteristics.
2. Perceptions of enforcement campaigns.
3. Perceptions of community campaigns.
4. Barriers to wearing PFDs.
5. Facilitators of wearing PFDs.
6. Other intervention opportunities.

Within these categories, any differences in findings across the regions visited, as well as across different types of fishers are highlighted. Quotes from fishers and stakeholders have also been included to illustrate feedback given to researchers, which informed these findings.⁹

PFD use and fisher characteristics

During the interviews, fishers and stakeholders reported a range of factors which were perceived to influence PFD use among fishers.

Regulation and enforcement activities

Fishers and stakeholders typically felt PFD use had increased since PFD wearing was mandated in 2018, and subsequent enforcement activity. However, this was not consistent across all ports. Fishers and stakeholders reported a range of views regarding PFD use amongst fishers which they believed were influenced by changes in regulation and enforcement activities. Some fishers and stakeholders reported not having seen any change in fishers' compliance with regulations requiring the wearing of PFDs. In contrast, some fishers and stakeholders felt that PFD use has increased over time, but that compliance could be improved. Both fishers and stakeholders believed that there continues to be a proportion of fishers who do not wear PFDs.

“I don't think there's been a huge change in people wearing PFDs since it became mandatory. The people who want to wear them are wearing them, the people who don't want to aren't” – *Stakeholder, North-East port*

⁹ Square brackets have been included in some quotes. This indicates that word(s) within these brackets have been amended to provide clarification about the meaning or context of a quote, rather than the exact words stated by fishers or stakeholders.

“I’ve seen a big change since getting into fishing. I don’t know the latest statistics, but I’d say [PFD wearing] went from around 4% of fishermen to 70%”
– *Stakeholder, South-West port*

Geographical variation

There was variation across ports in perceived compliance with PFD use. In some ports, fishers and stakeholders reported there was a strong culture of non-compliance with PFD use with few, if any, commercial fishers wearing PFDs. Other ports had higher self-reported rates of use. Nonetheless, there was a range of PFD compliance within all ports, with examples of some fishers wearing PFDs in ports with otherwise low PFD use amongst the fleet. Conversely, there were also examples of non-compliance with PFD wearing at ports with otherwise high levels of PFD use.

“The culture has shifted a lot in the last few years. Everyone who works for us now wears their PFD” – *Stakeholder, South-East port*

“None of the fishers here ever wear lifejackets” – *Stakeholder, North-East port*

Fishing experience

Generally, fishers with more years of fishing experience reported being less likely to wear PFDs, compared to fishers with less experience. Multiple stakeholders and fishers reported that more experienced fishers can be resistant to PFD wearing. Both stakeholders and fishers reported that this group represents a difficult demographic to encourage PFD wearing through targeted behavioural interventions, given the perceived depth of these fishers’ existing beliefs and attitudes towards PFDs.

Fishers and stakeholders across all ports perceived that younger or newer fishers were more likely to wear PFDs than more experienced or older fishers. Fishers reported that fishers who were newer to working in the industry did not have the experience of not wearing PFDs for most of their careers, which made them more amenable to wearing PFDs. Fishers and stakeholders also reported that newer fishers would have more recently completed training course(s) (before legally being able to start fishing), compared to some older or more experienced fishers. These training courses would have highlighted the importance of wearing PFDs and the regulatory requirements, in turn making it more likely newer fishers would wear PFDs.

“I’ve only been fishing a few months and I always wear mine. Most others don’t wear them, they are set in their ways” – *Fisher, South-East port*

“Younger fishers are more likely to wear PFDs, but older fishers’ wouldn’t” – *Stakeholder, North-East port*

Types of fishers

There were mixed views about whether single-handed fishers were more or less likely to wear PFDs. There was generally a consensus from both fishers and stakeholders that single-handed fishers might be more at risk of a serious MOB incident, given that if they did go overboard there was no-one else to immediately assist them. Some fishers (including single-handed fishers and those working with larger crews) felt that there was no chance of survival in a MOB incident on a single man boat so wearing a PFD would make no difference. Conversely, a few single-handed fishers reported that they felt the risks were greater and so reported high compliance with wearing PFDs.

“Solo fishers have the highest risk of non-compliance” – *Fisher, South-East port*

“Single-handed fishers are more likely to wear [PFDs]” – *Fisher, South-West port*

Fishers who supplied their catch to merchants or worked on larger vessels reported being more likely to wear PFDs. In some ports, fishers and stakeholders reported that fish merchants wouldn’t buy from fishers who did not wear PFDs. This may act as a financial incentive for fishers to wear their PFDs. Similarly, fishers and stakeholders reported that fishers who worked on hired vessels, particularly larger vessels, were more likely to wear PFDs. This was suggested to be a result of these larger vessels being more directive towards crew in requiring PFD use. Fishers also noted that larger vessels may have more resources to purchase and manage the practical aspects of PFD use (such as cost, paperwork, servicing), compared to smaller vessels. Furthermore, larger companies may not hire fishers who refuse to wear PFDs, whereas skippers of smaller boats are less able to do so, given their need for staff. One owner of a fishing company reported that this enabled them to ensure high compliance amongst their fishers.

“We make sure everyone who fishes for us wears a PFD. We’ve previously lost men who refused...we’re a big enough company that we are able to lose fishers because of this and still be fine” – *Stakeholder, South-East port*

“The company forces me to wear one” – *Fisher, South-East port*

Perceptions of enforcement campaigns

Enforcement actions and the threat of enforcement actions were the most commonly reported driver of PFD wearing among fishers. As indicated in the

section above, legal requirements and enforcement activity were consistently reported across all ports visited by researchers, as being responsible for the increase in PFD use amongst fishers in the last few years. Both fishers and stakeholders reported being aware that PFD wearing is now required by law, and that if they were caught not wearing PFD, they could face follow-up enforcement action. Across most ports, fishers and stakeholders frequently pointed to regulatory changes and enforcement activities as a driver of change in increased PFD use over the past few years.

“Me and the other crew members are now wearing PFDs pretty consistently, because we don’t want to get fined” – *Fisher, North-East port*

“It’s the law now. We wear them because it’s the law” – *Stakeholder, South-East port*

Enforcement activities were not viewed as a popular method of encouraging PFD wearing and were also suggested to undermine the relationship between fishers and the MCA. Whilst the most reported reasons for wearing PFDs were the mandatory nature of PFD wearing and the threat of enforcement actions, some fishers felt these could be ineffective in increasing PFD use. This was because some fishers felt that the threat of enforcement actions may lead to resistance from fishers. Moreover, fishers across all regions reported that enforcement actions regarding PFD compliance could contribute towards a negative perception of the MCA as an agency that does not support fishers’ welfare or wellbeing.

“Enforcement is not a good idea. It causes resentment [towards the MCA]” – *Fisher, South-West port*

“Fining people won’t help...it will only make people hate the MCA more” – *Fisher, North-East port*

There were differences across ports regarding the familiarity and visibility of enforcement activities. In the South-West, fishers generally reported that they were highly familiar with enforcement activities, particularly from MCA owned or operated planes and drones. Fishers in the North-East also reported being familiar with such enforcement activities. Frequent enforcement flights in these regions meant that fishers in these ports knew flights were occurring, had witnessed flights, and some also felt that they might be able to predict the type of conditions in which the flights were more likely to occur. However, fishers in the South-East reported having comparatively fewer experiences with such activities.

“We have had the MCA fly drones over [this port] pretty regularly” – *Stakeholder, South-West port*

“I know that PFDs are mandatory, but I think no-one is enforcing around [here]”
– *Stakeholder, South-East port*

Some fishers and stakeholders also suggested that enforcement activities could lead to a reduction in PFD wearing compliance. Some fishers and stakeholders reported that there could be fishers who might try to ‘game the system’. For example, if they believe that enforcement flights are more likely to occur on calm days, they may wear PFDs on those days to avoid enforcement actions from the MCA rather than in all weather conditions. Some fishers also reported that there could be fishers who would only wear a PFD loosely around their neck, rather than fitting it properly, in an attempt to appear that they were complying with PFD use.

“Some fishermen as a result [of enforcement] are even more set on not wearing one even though it benefits them in rough conditions” – *Stakeholder, South-West port*

Fishers and stakeholders reported a lack clarity on the enforcement consequences for not wearing a PFD. Many fishers and stakeholders reported that they had heard of other fishers receiving further enforcement action for not wearing a PFD. Many fishers also stated they believed that not wearing PFDs could later result in a fine. However, most were unsure of the amount of fine. There were also some conflicting reports on whether all crew on a vessel would receive further enforcement action, or whether only the skipper or owner of the vessel received the enforcement action.

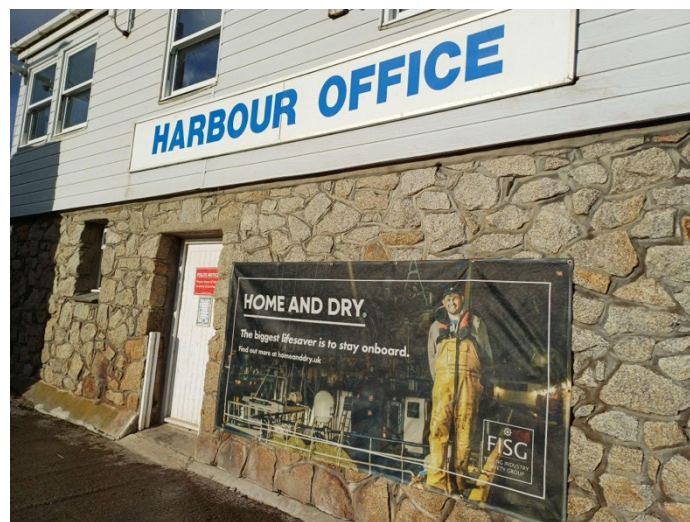
Some fishers and stakeholders reported that the MCA either contacted fishers who were caught not wearing a PFD by telephone or sent postal letters. However, fishers and stakeholders did not distinguish between whether such a letter was a warning, or an official Notice of Intent to Prosecute (NIP).

Some fishers had received a NIP from legal representatives of the MCA as a result of being seen at sea without wearing a PFD. One of these fishers stated that they had successfully challenged this notice, given that they had a valid risk assessment to show they didn’t need to wear a PFD. They also questioned whether they, or other fishers with a risk assessment, would need to provide this if they were spotted without a PFD from enforcement flights. This sentiment was also expressed by some other fishers and stakeholders across all regions. Fishers and stakeholders stated they did not know how the MCA’s enforcement activities, particularly the use of planes or drones to spot fishers, could identify whether vessels had a risk assessment that precluded the need to wear PFDs. Additionally, whether certain types of PFDs or buoyancy aids were unsuitable and could result an NIP, or further enforcement action (even if these were being worn by fishers).

Perceptions of community-based campaigns

There was generally limited recognition of community-based campaigns by fishers across ports. Most fishers and stakeholders reported that they had not seen posters or materials of community-based campaigns (e.g. posters or videos of the Home and Dry campaign¹⁰). However, this may have been due to lack of recall rather than these campaigns not being present in ports. For example, two fishers in Mevagissey reported that they had never seen the Home and Dry campaign, despite the poster being present outside the wall of the Harbour Office at the time of the interview (Figure 1). Some fishers in Mevagissey, Whitby and Seahouses did recall seeing posters or videos from the Home and Dry campaign on social media.

Figure 1: Poster of 'Home and Dry campaign' outside of a Harbour Office¹¹



Some fishers and stakeholders were confused by the community-based campaigns presented to them during the interview. When researchers presented examples of community-based campaigns, some fishers and stakeholders stated they did not understand the purpose of the poster. As an illustrative example, when one fisher was shown examples of the 'home and dry' campaign and then asked for their opinion, they simply shrugged. It was not until after researchers prompted whether these posters could encourage PFD wearing, that they recognised these campaign posters were about wearing PFDs. They reported thinking that the posters were referring to other safety-related issues, such as ensuring vessels were well serviced and maintained.

“Home and Dry’ what does that mean?” – *Stakeholder, South-West port*

¹⁰ Fishing Industry Safety Group (2020). *Home And Dry*. <https://www.homeanddry.uk/home-and-dry/>

¹¹ Photograph taken by BIT researchers during the port visit to Mevagissey (27th November, 2023)

Community campaigns, especially those that were family-focused were considered unlikely to increase PFD use. Most fishers and stakeholders reported that they did not feel these campaigns would be relevant to fishers' day to day experience of fishing, although some expressed it might resonate with fishers. Some fishers and stakeholders reported that fishers may be less likely to be swayed by these types of messages due to having accepted the risks associated with fishing, including the potential of going overboard. For example, one stakeholder reported that the messages were "too wishy washy" and that a hard-hitting message about risks was needed.

Compared to fishers, stakeholders more often thought that these campaigns might be effective in increasing PFD use, given the reminder about the impact an MOB incident would have on their families. Some stakeholders, such as Harbour Masters, also felt these campaigns might have more resonance with fishers who have families or parental/caring responsibilities as opposed to those that do not.

"All these campaigns are too soft-hearted" – *Fisher, South-West port*

"[The home and dry poster is] very powerful. This would stick with me if I saw it"
– *Fisher, South-East port*

Facilitators of PFD use

Researchers identified three themes from the interviews with fishers and stakeholders which appeared to increase the use of PFDs among fishers.

1. Working for a hired boat or company

As discussed in the section above, these companies were able to provide equipment and manage the practical difficulties of providing PFDs thus potentially making it easier for fishers to comply.

"Our company provides PFDs for all the fishers, and also does the servicing for them which helps compliance. When the grants came in, we helped do all the paperwork" – *Stakeholder, South-East port*

2. Experience with Man Overboard incidents

There was some suggestion that experience with MOB incidents or near misses might increase PFD compliance, at least in the short term. However, views were mixed on this.

"There was a guy who went overboard without a PFD [in the harbour] and got saved. He has always been wearing his PFD since. For the first few weeks

after the incident, more of the other fishers... wore PFDs as well. However, this has faded over time” – *Fisher, South-West port*

“There was an incident when a fisher drowned around 10 years ago which didn’t change others’ attitudes- they probably thought ‘stupid idiot, I’d never make that mistake’” – *Stakeholder, South-East port*

3. Experience of receiving NIPs or further enforcement action

Both fishers and stakeholder reported that experience with enforcement personally or via hearing of others’ experiences could increase compliance. However, this was not a universal perspective.

“I’ve been caught by one of the flights. Now we wear them when on deck” – *Fisher, South-East port*

“We’ve been caught before. Now I always wear my PFD and so does the crew, we don’t want to be fined again. My Dad still doesn’t wear one though” – *Fisher, North-East port*

Barriers to PFD use

Based on interviews conducted, researchers also identified four common barriers which made it harder, or less likely that fishers would wear PFDs. Additionally, less consistent barriers to wearing PFDs were also reported.

Common barriers

1. Perception that PFDs are dangerous for certain work

A consistent theme across ports, particularly for potters and trawlers, was a perception that a PFD might get tangled in the equipment and pull the fisher overboard. As such, some fishers reported that they felt wearing a PFD created more risk than benefit.

“I was pulled over by the nets the one time I wore a PFD. I think they’re dangerous. Another guy was pulled over potting, he thinks he would have died if he was wearing a PFD” – *Fisher, South-East port*

“PFDs are dangerous for the type of fishing we do - shooting and hauling pots, as it could get caught up in the nets” – *Fisher, North-East port*

2. Complacency

Fishers and stakeholders commented on a sense of complacency amongst fishers. Participants felt that fishers' competence and experience meant that they believed they were unlikely to have an incident requiring a PFD.

"I never wear a PFD, I've been fishing for decades and never went overboard"
– *Fisher, South-West port*

"Older fishers have an attitude that they've always not worn it and are still here, so they don't need to wear it" – *Stakeholder, North-East port*

3. Impracticality

Some fishers reported that they felt PFDs were difficult to work in, could be uncomfortable and could accidentally inflate at times. Some fishers also noted that buoyancy aids were more comfortable than PFDs. However, one stakeholder reported they felt that the perceived impracticality of PFDs was used as an 'excuse' by fishers to not wear them, rather than it being a substantive barrier to wearing PFDs.

"Accidental inflation can be an issue with PFDs - also means you have to then pay for another one" – *Fisher, South-West port*

"PFDs aren't that easy to work with when moving around on the boats" –
Fisher, North-East port

4. Personal choice

Some fishers also felt that PFD use was a personal choice, up to the individual or the skipper, and their risk assessment, rather than being something that should be mandated by the MCA.

"It's a personal choice, who are they to tell me to wear one? It's my life" –
Fisher, South-West port

"It should be up to the skipper to decide when he and his crew should and shouldn't be wearing a PFD" – *Fisher, North-East port*

Other barriers

5. Financial cost

Some fishers believed that the cost of purchasing and servicing PFDs could be a barrier to their use. However, some stakeholders reported they felt this was not a substantial barrier for fishers, given purchasing and servicing a PFD was likely to be a very small proportion of the operating costs for maintaining a vessel. Moreover,

some stakeholders reported there had been schemes to provide fishers with free, or heavily subsidised, PFDs. One stakeholder also stated they had been involved in delivering these PFDs to fishers, which had also included free servicing for a year. However, when it came time to offer servicing for these PFDs, some fishers no longer had them as they had reportedly these sold off.

“It’s expensive to buy PFDs, and there’s added costs if they don’t last. It also costs to have them serviced annually” – *Fisher, South-West port*

6. Sense of fatalism or nihilism

There was a sense from some fishers that if they went overboard, the chances of survival were slim, and therefore wearing a PFD would not make a difference in this situation.

“Just die fast, make it as quick as possible” – *Fisher, South-East port*

7. Risk perception

PFD use was reported by some fishers to be related to a personal risk assessment that a fisher carries out. When the risk is perceived as high, then PFDs might be worn but not otherwise. Additionally, many fishers reported that they do not understand why PFD wearing is required in situations that they perceive to be safe (e.g. in the harbour or on calm days).

“You do a personal risk assessment of when to wear PFDs. On a sunny day it’s not worth it, when the weather is rough then do wear it” – *Fisher, South-East port*

8. PFDs wearing out

Some fishers expressed that PFDs could wear out quickly and felt that this could mean that they are more likely to be defective when they are needed in a MOB incident.

“PFDs might not work properly, especially with wear and tear when continually worn” – *Fisher, South-West port*

9. Confusion about PFDs

Some fishers were unclear about when a PFD should be worn, and which PFDs were required. Some fishers also reported being unclear whether buoyancy aids were sufficient to meet the regulatory requirements of wearing PFDs.

“I wear a waistcoat when I go out. There might have been a change so I can’t get away with this anymore, I don’t know what the rules are” – *Stakeholder, South-East port*

10. Further enforcement action being ‘worth it’

Researchers were told by fishers that some would not perceive further enforcement action, such as a fine, to be enough of a deterrent to change their behaviour.

“If I could just pay a £600 fine once per year and not wear my PFD, I wouldn’t [wear it]” – *Fisher, South-East port*

Other intervention opportunities

Messengers to deliver campaigns

Family and friends could be used as messengers to help promote PFD wearing, but this was reported as being unlikely to shift fishers’ behaviour.

Participants had mixed views about whether family and friends would be suitable messengers for campaigns to promote PFD wearing. Some fishers and stakeholders felt that family members could cause fishers to rethink their PFD use, but others did not. Some also reported this could lead to resentment between family members, or that fishers would tell family members ‘what they want to hear’, without necessarily changing their behaviour.

“Asking wives and children to encourage their husbands to wear a PFD probably won’t work. A fisher will come home and tell his wife what she wants to hear” – *Fisher, South-West port*

“Fishers would listen to their wives and kids more than they would authority figures” – *Stakeholder, South-East port*

The MCA was not perceived to be a trusted authority for promoting the safety of fishers. Some views included perceptions that the MCA was a bureaucratic body with limited consideration of fishers’ day-to-day experiences. Some fishers also felt that the MCA did not do enough to consult with fishers prior to issuing new regulations or that new regulations were intentionally designed to make it harder for local fishers to continue operating, and to favour other larger organisations or commercial industries, such as wind farms.

“We don’t trust messages that are supposed to show authorities care about the safety of fishers” – *Fisher, South-West port*

Methods of communicating with fishers

Fishers and stakeholders were critical of how useful posters were at communicating to fishers. Fishers and stakeholders noted that fishers were not likely to pay attention to posters, especially when there were multiple posters already around the port. Some fishers reported they might notice a new poster, but unless this was changed frequently it was unlikely to capture their attention.

“I’ve probably walked past these [posters] and never noticed” – *Fisher, South-East port*

Social media was considered a potentially useful avenue to share information with fishers. Fishers and stakeholders reported that a lot of fishers use social media platforms, including older fishers who may be more unfamiliar with other technological services or platforms. Some fishers also reported having some free time whilst waiting for their catch, during which they would be checking social media.

“Social media could be a good way of communicating messages, or through the fishing association” – *Stakeholder, South-East port*

“Fishers can end up watching a lot of TV, checking WhatsApp, Facebook etc. when they’re out waiting during the day” – *Fisher, South-West port*

Fishers and stakeholders suggested intervention messages should be simple and visual. Some fishers and stakeholders noted that literacy may be limited for some fishers. This may raise difficulties for them in understanding messages in posters, or other text-heavy communications such as letters. For example, one stakeholder mentioned that they felt a poster with a poem about a lifejacket (see poster in [Annex 2](#)) was ‘too wordy’ and that fishers wouldn’t understand the message.

Another stakeholder said that any posters or leaflets with ‘technical language’ wouldn’t be read by fishers, although they didn’t give examples of what language this might be. As another illustrative example, a fisher in the South-East, when presented with different kinds of posters with PFD campaign messages, reported these made no difference to them as they could not read.

In person education opportunities

In person courses or education at the port-side were also thought to be a potentially useful way of sharing information by fishers and stakeholders. All fishers now must complete the basic sea survival course before going to sea for the first time. Some fishers had also heard of a cold-water tank being used in Scotland for this training, which they felt would be more likely to affect behaviour change due to being more

akin to real MOB incidents. In person courses were identified by some fishers as a good opportunity to educate fishers about the reasons for wearing PFDs, how to wear PFDs, the types of PFDs and the potential repercussions of non-compliance.

“The sea survival course is really helpful. If fishers had practised and had good plans [for how to survive a man overboard incident] it might make them more confident. Education is the most important thing” – *Fisher, South-East port*

“Someone coming down to the harbour could be helpful- like a representative of a PFD company who could tell them about it. It would need to be someone they trust and would listen to” – *Stakeholder, South-East port*

“[RNLI’s man overboard course] was an eye opener” – *Fisher, North-East port*

4. Recommended interventions

This section presents four interventions to increase PFD use among commercial fishers. These interventions were determined to be the most suitable of those generated internally by BIT and refined in the further solutions workshops with the DfT and the MCA. The four interventions are:

1. Enforcement awareness campaigns.
2. Myth-busting campaigns.
3. In-person events to promote understanding of the different types of PFDs.
4. Simplifying regulatory information.

These interventions, their justifications, limitations and how they would be delivered and trialled are explained in more detail in the following sections.

Enforcement awareness campaign

This intervention would be an email and letter-based campaign, including a suite of leaflets, sent by the MCA. The message would be a simple, clear message reminding fishers about the legal requirement to wear a PFD and the existence of monitoring flights. Emails and letters could be sent to all registered fishers in the UK, or targeted at those in high-risk groups, such as smaller vessels, potters, or ports with known low compliance rates.

Rationale

Message

Many fishers reported that experience and awareness of enforcement activity had motivated them to use a PFD.

Such campaigns could increase the awareness of the consequences of not wearing a PFD amongst fishers. People tend to dislike losses more strongly than they like gains of equal value (referred to 'loss aversion').¹² This suggests that if fishers are made aware of the cost of not wearing a PFD, they are more likely to consider that the benefits of wearing a PFD, are better than the cost of not wearing PFDs. This strategy could also address the barrier of fishers considering the possibility of further enforcement activities as being 'worth it', by increasing the perceived likelihood of facing more frequent enforcement actions and by being reminded of enforcement activities through these leaflets. As such, increasing awareness of enforcement

¹² Brown et al. (2021). Meta-analysis of empirical estimates of loss-aversion *CESifo Working Paper No. 8848* ; Kahneman, D., and Amos, T. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 47(2): 263–292.

activity may be a suitable strategy to increase PFD use.

Method of communication

A multi-channel approach using letters and emails could enable the campaign to reach more fishers compared to a single channel approach using either letters or emails.

The salience of a message can also be affected by its delivery method. While a paper letter might be more noticeable in a physical sense (especially in today's digital age), an email can be structured to catch attention through subject lines, which are seen prior to opening the email (in contrast, letters are typically enclosed in an envelope with only the name and address of the reader). Emails also offer a quick and cost-effective method of communication. However, some could perceive emails as being an informal method of communication, which might lack the formality and authority associated with physical letters.

Messenger

People are more likely to act on information provided to them by a messenger if they are perceived to be in a position of authority, perceived to have similarities to themselves, and if they have positive feelings towards them.¹³ The MCA is well placed to be a messenger regarding enforcement campaigns, given its regulatory authority.

APEASE rating

Table 6 shows the APEASE ratings made by BIT for this solution.

¹³ Wilson, E. J., & Sherrell, D. L. (1993). Source effects in communication and persuasion research: A meta-analysis of effect size. *Journal of the Academy of Marketing Science*, 21(2), 101.

Table 6: APEASE ratings for the enforcement awareness campaign

APEASE criteria	Rating (Low, Medium, High)	Justification
Acceptability	Medium	Likely poor acceptability to non-compliant fishers. Likely more acceptable amongst stakeholders and fishers who are already compliant.
Practicability	High	Enforcement activities and flights already occur. The ability to send letters or emails is relatively simple. There is a government platform available to send email notifications to individuals ¹⁴
Effectiveness	High	Both fishers and stakeholders have reported that enforcement activities have shifted behaviour on increased PFD use
Affordability	High	Letters and static email campaigns are relatively low-cost to design and deliver.
Spillover effects	High	Could reinforce negative perceptions of MCA.
Equity	Medium	Enforcement activities could impact smaller, single or double-handed vessels more than larger and more commercial vessels, as they may have fewer resources to purchase and maintain PFDs. Fishers with low literacy skills may not understand the message.

¹⁴ <https://www.notifications.service.gov.uk/>

Considering the overall APEASE ratings, this is recommended to be prioritised for further testing and evaluation, ahead of potentially implementing on a larger scale.

Potential challenges and risks

Given previous research¹⁵ it is important to consider that an enforcement campaign is only likely to lead to a sustained increase in PFD use if the enforcement activities are seen to be frequent and proportional to deter behaviours rather than acting as a 'cost' to behaviour.

Additionally, the relationship between fishers and the MCA is challenging, with many fishers holding negative views about the MCA and their position and authority. As such, highlighting the power of the MCA to deliver enforcement activities, particularly when many fishers do not currently agree with the need to wear a PFD, may deteriorate this relationship further. This may impact the efficacy of the MCA's work in the future.

As such, although this is likely to be a useful solution, there is significant spillover risk.

'Myth-busting' campaign

This intervention would be a brief video, or series of brief videos which include testimony from one to two fishers, ideally who are members of groups that our research suggests are at higher risk of non-compliance (i.e., crabbers, potters, single or dual handers). Each of these videos could include fishers from these groups wearing a PFD and discussing some or all of the following topics:

- Their decision to wear a PFD.
- Their ability to do their job in a PFD.
- Having experienced a near-miss, or MOB without wearing a PFD, even though they were seasoned fishers with years of experience.
- Recommendations of which PFD they find useful for their work.
- Footage of them working whilst wearing a PFD.

This video would be shared via targeted social media campaigns. This includes the use of a spokesperson who is similar to the target audience in terms of experience, fishing type and location, and a visual demonstration of how fishing whilst wearing a PFD is possible. The video narrative could include a fisher speaking of their experiences with PFDs in a way that directly tackles one of the 'myths'.

¹⁵ Gneezy, U., & Rustichini, A. (2000). A Fine is a Price. *The Journal of Legal Studies*, 29(1), 1–17. <https://doi.org/10.1086/468061>

Using a video, including captions, can increase the accessibility of this message to those who might not have English as their first language or might struggle to engage in long-text based communication.

Rationale

Message

This solution could address some of the prevailing barriers to wearing PFDs. Namely, that wearing a PFD is more dangerous than not for certain work, particularly potting and netting, and that it is uncomfortable to work in or would impede fishers' ability to work. This could also help to clarify barriers regarding what type of equipment is considered a PFD, as well as countering expectations that regardless of wearing a PFDs a MOB incident could result in a fatality, particularly for single-handed fishers, or fishes with smaller crews.

Despite many fishers reporting these barriers as significant impediments to PFD use, many other fishers in similar situations wear PFDs for their work without issue. Therefore, sharing these fishers' experiences may be useful to tackle some of these prevailing barriers.

Method of communication

Social media was reported to be an easily accessible platform for most fishers. By utilising social media, these videos could have a national reach and maximise the likelihood of reaching fishers on an ongoing basis.

Moreover, social media campaigns can also provide increasingly targeted and actionable information to fishers, allowing for videos to be localised to audiences in specific regions of the country. For example, this could include showing fishers videos of a spokesperson fishing in a similar region to themselves.

Messenger

The MCA is unlikely to be a suitable messenger for this campaign given fishers might consider the MCA as having less expertise and trustworthiness around PFD wearing. Therefore, other organisations which are likely to be seen as a reliable source of information, such as the DfT, or sea safety training organisations, are likely to be better messengers for this campaign.

APEASE rating

Table 7 below shows the APEASE ratings by BIT for this solution.

Table 7: APEASE ratings for the ‘myth-busting’ campaign

APEASE criteria	Rating (Low, Medium, High)	Justification
Acceptability	High	Likely acceptable by fishers, if created effectively (testimony needs to be seen as trustworthy and accurate). Likely acceptable by stakeholders and the MCA. Social media was a frequently suggested medium for a campaign by fishers and stakeholders.
Practicability	Medium	Social media campaigns are likely to be easy to implement. This would need investment of time and resources to identify fishers to provide testimony and produce a professional video.
Effectiveness	Medium	Directly tackles the prevailing barriers for PFD use identified during research. It may be challenging to ensure fishers engage with the material and watch the video, and technical solutions to measure engagement would increase resources required.
Affordability	High	There would be modest costs to produce a small number of testimony videos and a targeted social media campaign, with good availability of partners to complete the work.
Spillover effects	Medium	There is the potential to create additional confusion for fishers around PFD use if the testimony messaging is not clear and in line with the regulatory position (i.e. which PFD to wear and when).

APEASE criteria	Rating (Low, Medium, High)	Justification
Equity	High	This campaign would directly target the fishers with the lowest compliance who are most likely to benefit from PFD wearing (e.g. potters).

Considering the overall APEASE ratings, this is recommended to be prioritised for further testing and evaluation, ahead of potentially implementing on a larger scale.

Potential challenges and risks

This solution relies on the fishers watching the video produced. However, by using a meaningful messenger that has strong similarities to the target population, and explicitly targeting barriers that fishers have to PFD wearing, it is hoped that this video would be engaging for the target audience. However, those who are particularly uninterested in PFD use or those who do not use social media regularly will not be likely to view the video.

In-person events to promote understanding of different types of PFDs

This solution would involve in-person education from manufacturers of PFDs. This would involve a representative from a PFD manufacturer attending a port to demonstrate the PFDs available that might be best suited to fishers' work. To encourage engagement from fishers, this should be integrated into other community or industry-based events.

Similar events have operated in the US, such as the 'Lifejackets for Lobstermen' campaign, with some reported success in engaging commercial fishers (Figure 2)¹⁶. Although the UK commercial fishing market is relatively small compared to the US, some manufacturers may be willing to run events such as this due to the potential health and safety benefits of increasing PFD use amongst UK fishers.

¹⁶ <https://necenter.org/portfolio/lifejackets-for-lobstermen/>

Figure 2: Photograph from the *Lifejackets for Lobsterman* campaign in the US¹⁷



Rationale

Message

As with the myth-busting campaign, this solution focuses on education and information sharing to tackle some of the prevailing barriers to wearing PFDs, including practical barriers of wearing PFDs and working in them. As with the myth-busting solution, this intervention is drawn from the frequent barriers reported by fishers which include the perception that PFDs could be dangerous for certain types of fishing work, are too uncomfortable to be worn, or what equipment counts as a PFD.

Method of communication

Many stakeholders and fishers reported that in-person education was important in changing fishers' views on the use of PFDs. In-person education, although potentially more costly and complex, has the advantage of accessing fishers who might not engage in other forms of communication such as social media, and can provide powerful experiences that can help fishers to learn about PFDs.

Messenger

PFD manufacturers are knowledgeable stakeholders with incentives to organise these events and to share information about PFDs with fishers.

APEASE rating

Table 8 below shows the APEASE ratings by BIT for this solution.

¹⁷ Photograph sourced from North East Center for Occupational Health and Safety. Retrieved from: <https://www.nationalfisherman.com/the-skinny-on-pfds>

Table 8: APEASE ratings for the in-person education events

APEASE criteria	Rating (Low, Medium, High)	Justification
Acceptability	High	Likely to be relatively acceptable by wider stakeholders and fishers.
Practicability	Medium	Would require the development of relationships with PFD suppliers who are willing and able to organise these events.
Effectiveness	Medium	Fishers would need to engage in the information provided, so these sessions would need to be marketed to fishers in a way which would encourage attendance and engagement.
Affordability	High	PFD suppliers should be willing to fund these events. The MCA should coordinate these sessions across different regions, which is unlikely to have additional costs to the MCA and DfT (other than resourcing).
Spillover effects	Low	Likely to have limited spillover. Some fishers may be critical of these events, perceiving them to be motivated by suppliers' financial interests, rather than their own safety.
Equity	Medium	Would need to ensure these events are conducted across different ports, rather than only at the larger or more geographically convenient ports.

Considering the overall APEASE ratings, this intervention is suggested to be a lower

priority for further testing and evaluation, given the potential challenges in being able to implement this intervention at a lower cost to MCA and DfT (as outlined below).

Potential challenges and risks

PFD suppliers would need to be willing to engage with running these events. Although costs for the MCA should be minimal, the costs to suppliers of putting on these events may be relatively significant. Additionally, fishers need to attend these events. Conducting events by the port, at the end of the working day and integrating with other community events are all ways to maximise the chance of engagement. Events would need to be conducted across different ports, rather than only at the larger or more geographically convenient ports to minimise inequitable access to these events. Finally, there is a risk that some fishers may view these events as being motivated by suppliers' financial interests, rather than their own safety.

Simplifying regulation webpages

PFD regulation is complex, with lots of scenario-specific considerations. The regulatory page itself could be simplified, with an additional one-page explainer which is visual, tailored to fishers with clear explanations of the regulations for PFD use for commercial fishers. This would also help to address issues raised by fishers regarding confusion around what specific PFDs are required to be worn, as well as what PFDs might result in enforcement activities.

To supplement this change, and to draw fishers' attention, this one-page explainer could be sent in letters to fishers or via a social media campaign, informing them that the MCA has listened to their feedback about the clarity of regulations and has provided simplified explanations in response.

Rationale

Message

This solution draws from the fact that many fishers were not clear about the regulatory requirements and when a PFD was expected to be worn. The use of buoyancy aids rather than PFDs, the use of risk assessments and how location and weather impacts on the need to wear a PFD were all raised as points of potential confusion. This confusion may make it challenging to accurately comply with regulations, and therefore this solution involves clarifying the regulatory requirements in a simple and accessible way.

Method of communication

As with previous solution suggestions, sharing the updated explainer via social media and a letter campaign would ensure that all fishers have access to the updated information.

Messenger

Given the nature of regulatory information, it is important that this information comes from a legitimate source, in this case the MCA, who can implement the regulatory clarification.

APEASE rating

Table 9 below shows the APEASE ratings by BIT for this solution.

Table 9: APEASE ratings for simplifying regulation.

APEASE criteria	Rating (Low, Medium, High)	Justification
Acceptability	High	Likely to be acceptable to all stakeholders.
Practicability	Medium	Creation of one page explainer and associated social media/ letter campaigns should be simple to implement. Changing of an official governmental regulation page may be challenging.
Effectiveness	Medium	Limited immediate effect as many fishers may understand the broad requirement to wear PFDs. However, whilst fishers' engagement with regulations may be infrequent, this can help to address misperceptions about requirements of when fishers may experience enforcement activities and why, for not wearing PFDs. This solution may be best placed as a complementary intervention alongside one of the other solutions identified in this report.

APEASE criteria	Rating (Low, Medium, High)	Justification
Affordability	High	Costs to produce a simple one-page explainer should be low. Social media/letter campaigns should also be relatively affordable.
Spillover effects	Low	Limited spillover likely, as long as regulations are clear and make sense to fishers.
Equity	High	Helps to ensure all fishers are provided with up-to-date information around PFD use and regulation so no fisher is at an informational disadvantage. Using simple language and pictures will increase the chance that fishers without English as a first language, or limited literacy, will be able to understand the regulations.

Considering the overall APEASE ratings, this intervention is suggested to be a lower priority for further testing and evaluation, given the potential challenges of this intervention reaching a large number of fishers.

Potential challenges and risks

This intervention may have limited reach due to fishers needing to already have an intention to wear PFDs to engage with the regulation, and knowledge rarely being the primary barrier identified by fishers as preventing PFD use. It may be that this solution is best placed to supplement one of the other suggested interventions rather than being expected to lead to behaviour change by itself.

5. Conclusion and recommended next steps

This report presents the results of qualitative research conducted across eight ports in England, investigating the views of commercial fishers and related stakeholders on interventions to increase PFD use.

Generally, fishers and stakeholders expressed that enforcement campaigns could be a useful, although unwelcome, intervention to increase PFD use. Community campaigns were not felt to be as memorable or persuasive by fishers and stakeholders. Social media and in-person interventions were considered more useful mediums for communication than posters. The MCA was considered a good messenger for messages about enforcement activity, but not for messages regarding safety-related behaviours for fishers. Fishers and stakeholders also had mixed views on friends and family as helpful messengers to encourage PFD use.

With regards to PFD use, barriers identified were feeling that wearing a PFD was dangerous or that work could not be carried out in PFDs, that PFDs were uncomfortable, that fishers were complacent about the risks of MOB incidents and that the use of PFDs should be a personal choice. Facilitators to PFD use were the existence of central agencies, such as merchants who could provide and service PFDs, having experienced prior enforcement activities and, for some, previous MOB experience.

Researchers proposed four interventions that may be useful for encouraging PFD use amongst UK commercial fishers. These are: raising awareness of enforcement activities, using personal testimony videos to 'myth-bust' common reasons for not wearing PFDs, in-person education on PFD types delivered by PFD suppliers, and improving the clarity of regulatory messaging.

When considering the potential for new interventions to increase PFD use, the enforcement awareness campaign and 'myth-busting' campaign are recommended to be prioritised for trialling, prior to scaling the rollout of these interventions. These solutions are considered the most feasible and suitable solutions to help increase PFD use amongst commercial fishers in England.

Reference list

Brown, . L. Imai, T., Vieider, F. and Camerer, C. F. (2021). Meta-Analysis of Empirical Estimates of Loss-Aversion. *CESifo Working Paper No. 8848*, Available at SSRN: <https://ssrn.com/abstract=3772089> or <http://dx.doi.org/10.2139/ssrn.3772089>

Fishing Industry Safety Group (2020). *Home And Dry*.
<https://www.homeanddry.uk/home-and-dry/>

Gneezy, U., & Rustichini, A. (2000). A Fine is a Price. *The Journal of Legal Studies*, 29(1), 1–17. <https://doi.org/10.1086/468061>

Kahneman, D., and Amos, T. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 47(2): 263–292. Available at: <https://doi.org/10.2307/1914185>

Marine Accident Investigation Branch (2021). *Annual Report. Marine Accident Recommendations and Statistics*. Southampton: United Kingdom.

Maritime and Coastguard Agency (2021). *Marine Guidance Note 588 Amendment No.1 (F)*. Crown Copyright. Retrieved from:
https://assets.publishing.service.gov.uk/media/6179565fd3bf7f5601cf3135/MGN_588_Amendment_No.1.pdf

McCormack, E., Elliott, G., Tikuisis, P., and Tipton, M.J. (2008). *Search and Rescue (SAR) Victim Empirical Survival Model*. Report for the USCG

Michie, S., Atkins, L., and West, R. (2014). *The Behaviour Change Wheel: A Guide to Designing Interventions*. Great Britain: Silverback Publishing.

Ritchie, R., Lewis, J., McNaughton-Nicholls, C. and Ormston, R. (2014) *Qualitative Research Practice*. Sage: London.

Tipton, M., McCormack, E., Elliott, G., Cisternelli, M., Allen, A., & Turner, A. C. (2022). Survival time and search time in water: Past, present and future. *Journal of Thermal Biology*, 110, 103349. Available at:
<https://doi.org/10.1016/j.jtherbio.2022.103349>

Annex 1: Interview topic guides

Topic guide for interviews with fishers

Introduction

Hi, my name is [*researcher name*]. I work for a research company called the Behavioural Insights Team. The Department for Transport commissioned us to research the use of Personal Floatation Devices in commercial fishing. This is a part of DfT's goal of improving safety in the maritime sector.

We want to understand what you think about past and present campaigns that DfT (which includes the Maritime and Coastguard Agency) launched to increase PFD wearing. We would like to show you some of the campaigns, and hear your thoughts on each.

If you are available to contribute to this research, we would appreciate anything from a couple of minutes speaking here, to sitting longer in a cafe or other nearby location you feel comfortable speaking, and we can have a tea or a coffee.

Consent statement

We will take notes during the interview. Only BIT researchers on this project will be able to see these notes. At the end of our research, we'll write a report for the DfT. This report may include quotes from our talk. However, anything you say to us today will be anonymous. This means no-one will know what you've said to us. You will not be identifiable through any quotes. We will not record your name or any identifiable information. We will only ask about your fishing experiences.

Please note that the questions I am going to ask don't have right or wrong answers, we are interested in hearing your thoughts. And at any point, if you prefer not to answer a question, we can skip that. And if you want to end this interview at any time, you can do so without providing a reason.

Do you have any questions about anything I've just said?

Are you happy to proceed with the interview?

Background on participant

Thank you, I'd like to start by asking you a few questions about your background and experiences with fishing.

- Are you a skipper, crew member, or vessel owner?

- How many years of fishing experience do you have?
- What type of vessel do you work on? (under or over 10 metres)
- Does the vessel you work on have a consistent crew, or are people coming and going regularly?
- Have you ever attended a 'man overboard' or sea survival course, or experienced a MOB situation (including witnessing one)
- Do you usually wear your PFD when at sea?

Attitudes towards community-based interventions

Some messages focus on fishers and your loved ones. We will show you some of the campaign materials.

Please tell us what you think and feel for each. We are interested in everything, including immediate 'knee-jerk' reactions. There are no right or wrong answers, so please be honest! These campaigns and materials can only be improved if we hear about your actual views and get honest feedback.

[For each poster, or group of posters, ask:]

- What do you think about each of these messages?
 - What's going through your mind?
 - How does this make you feel?
- What do you like about these messages?
- What do you not like about these messages?
- How do you think fishers will react to these messages? / How do you think skippers will react to these messages?
- What do you think this will do for fishers wearing PFDs? / What do you think this will do for skippers in charge of a crew who might wear PFDs?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why? / why not?
- Is there anything else that you think this message might bring to mind for fishers?

[Show posters to participants]

- If you've seen similar messages previously, where did you see them?
 - Did you read the messages/posters?
 - Why?
 - Why not?

- How could messages around this theme of community and family affect fishers' decisions to wear a PFD? (i.e. either as an individual choice, or by making skippers more strict in requiring PFD wearing?)
- Could you describe what an ideal message to help you wear a PFD might look like?

Attitudes towards enforcement-based interventions

The DfT and the MCA have also focused on enforcement of PFD use. PFDs are now a legal requirement. The MCA's Surveyor's check PFD conditions during vessel checks. You may also have heard about the MCA using aircraft to check if fishers are wearing PFDs while at sea.

- Are you aware of these 'enforcement-based' interventions?
 - *[If yes]* If you're happy to share your thoughts, how did you hear about these? (i.e. experienced directly, heard from a friend, or rumours around port?)
- How do these make you feel?
 - Why?
- How do you think fishers will react to these?
 - What about fishers' decisions to wearing PFDs?
 - Why?
- Apart from maybe wearing PFDs, how else might fishers' attitudes or behaviours change because of these kinds of interventions?
- Compared to the previous posters, how do you find these 'enforcement interventions'?
 - Why?
- Are there any kinds of fishers you think might be more or less likely to respond to these interventions?
 - Why? / why not?
- Are there other enforcement interventions that you think would be effective in making fishers wear PFDs?

Attitudes towards other communications campaign interventions

There have been other communication campaign interventions with the same goal of increasing PFD wearing. We will show you some of the materials.

As before, there are no right or wrong answers, we're interested in what you think and feel for each. We are interested in everything, from immediate knee-jerk reactions, to how you personally relate to the messages.

[For each poster ask:]

- What do you think about each of these messages?
 - What's going through your mind?
 - How does this make you feel?
- What do you like about these messages?
- What do you not like about these messages?
 - How would you improve these messages?
- How do you think these messages will affect whether you wear a PFD/skippers require their crews to wear PFDs?
 - *[If yes]* why?
 - *[If no]* why not?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why? / why not?
- Do you think this message could have other effects than just changing fishers PFD use?
 - *[If yes]* why?

[Show posters to participants]

- If you've seen similar messages previously, where did you see them?
 - Did you read the messages/posters?
 - *[If yes,]* why?
 - *[If no,]* why not?
- What other messages would make your peers wear a PFD/make skippers require their crews to wear PFDs?

Attitudes towards other types of interventions

There have also been PFD distributions, free PFD servicing, free simulations at survival tanks interventions.

- Are you aware of any of these interventions?
 - *[If yes]* how? (i.e. experienced directly, heard from a friend?)
 - How did these make you feel?
 - Why?
- What do you think about the effectiveness of any of these interventions in making fishers wear PFDs?
- Is there anything else that you think these interventions might bring to mind for fishers?
 - *[If yes]* why?

AOB and close

- What else do you think would be helpful for fishers to wear PFDs / skippers to encourage their crew to wear PFDs?
 - [If yes] why?

That concludes all of our questions. Is there anything we haven't asked about that you think is important for us to know?

Do you have any questions or other comments?

If your participation in this study has raised any issues that you would like to discuss further you can contact [give name/s of support organisation] using the information below:

Fishermen's Mission – yorkshire@fishermensmission.org.uk

Mind – 0300 123 3393

Sail – 0800 160 1842

Topic guide for interviews with stakeholders

Introduction

Thank you for agreeing to spend some time talking with me today. My name is [researcher name]. I work for a research company called the Behavioural Insights Team.

The Department for Transport commissioned us to research the use of Personal Floatation Devices (PFDs) in commercial fishing. This is a part of DfT's goal of improving safety in the maritime sector.

We want to understand what you think about past and present campaigns that the DfT (which includes the Maritime and Coastguard Agency) launched to increase PFD wearing. We would like to show you some of these campaigns, and hear your thoughts on each. We would also like to know what you think about how these campaigns could be implemented at scale, in ports across England.

Consent statement

We will take notes during the interview. Only BIT researchers on this project will be able to see these notes. At the end of our research, we'll write a report for the DfT. This report may include quotes from our talk. However, anything you say to us today will be anonymous. This means no-one will know what you've said to us. You will not

be identifiable through any quotes. We will not record your name or any identifiable information. We will only ask about your fishing experiences.

Please note that the questions I am going to ask don't have right or wrong answers. At any point, if you prefer not to answer a question, we can skip that. And if you want to end this interview at any time, you can do so without providing a reason.

Do you have any questions about anything I've just said?

Are you happy to proceed with the interview?

Rapport-building and background questions

Thank you bearing with me for the formal parts, let's start by hearing a bit about you

- How's your day going so far?
- How long have you worked for [participants' organisation]?
- How do you find your role?

Attitudes towards community-based interventions

Some messages focus on fishers and their loved ones. We will show you some of the campaign materials.

There are no right or wrong answers, so please be honest! These campaigns and materials can only be improved if we hear about your actual views and get honest feedback.

[show materials]

- What do you think about these kinds of messages?
 - What's going through your mind?
 - Why?
 - How does this make you feel?
 - Why?
- How do you think fishers will react to these messages? / How do you think skippers will react to these messages?
 - Why?
- What do you think this will do for fishers wearing PFDs? / What do you think this will do for skippers in charge of a crew who might wear PFDs?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why? / why not?
 - Would you change anything about these messages?
 - Why?
- Do you think this would make fishers more or less likely to wear a PFD?

- How could these messages be rolled out nationally in ports in England?
 - What would this require?
 - What about the cost?
 - How realistic is this?
 - Why? / Why not?
- What would help rolling out these kinds of interventions across England?
- What are the barriers to rolling out these kinds of interventions successfully?
- How else do you think these messages might impact fishers, apart from their likelihood of wearing a PFD?
 - Why? / Why not?
- How else do you think these messages might impact fishers, apart from their likelihood of wearing a PFD?

Attitudes towards enforcement-based interventions

The DfT and the MCA have also focused on enforcement of PFD use. PFDs are now a legal requirement. The MCA's Surveyor's check PFD conditions during vessel checks. You may also have heard about the MCA using aircraft to check if fishers are wearing PFDs while at sea.

- Have you heard about these interventions?
- What do you think about these kinds of interventions?
 - How do these interventions make you feel?
 - Why?
- How do you think fishers will react to these messages? / How do you think skippers will react to these messages?
 - Why?
- What do you think this will do for fishers wearing PFDs? / What do you think this will do for skippers in charge of a crew who might wear PFDs?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why?
- Would you change anything about these messages?
 - Why?
- Do you think this would make fishers more or less likely to wear a PFD?
- How could these messages be rolled out nationally in ports in England?
 - What would this require?
 - How realistic is this?
 - Why? / Why not?
- What would help rolling out these kinds of interventions across England?
- What are the barriers to rolling out these kinds of interventions successfully?

- How else do you think these messages might impact fishers, apart from their likelihood of wearing a PFD?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why? / why not?

Attitudes towards other communications campaign interventions

There have been other communication campaign interventions with the same goal of increasing PFD wearing. Similar to before, I'll ask you to look through some examples of these for a few minutes, and then ask what you think and feel about these campaigns. There's no right or wrong answer, we're interested in your own views

[show materials]

- What do you think about these kinds of communications and campaigns?
 - What's going through your mind?
 - Why?
- How does this make you feel?
 - Why?
- How do you think fishers will react to these messages? / How do you think skippers will react to these messages?
 - Why?
- What do you think this will do for fishers wearing PFDs? / What do you think this will do for skippers in charge of a crew who might wear PFDs?
- What would help rolling out these kinds of interventions across England?
- What are the barriers to rolling out these kinds of interventions successfully?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why?
How else do you think these messages might impact fishers, apart from their likelihood of wearing a PFD?

Attitudes towards other types of interventions

I'd like to ask about other kinds of approaches to encourage fishers to wear PFD. There have been PFD distributions, free PFD servicing, free simulations at survival tanks interventions.

- What do you think about these kinds of interventions?
 - Why?
- How do you think fishers will react to these interventions? / How do you think skippers will react to these messages?

- Why?
- Are there any kinds of fishers you think might be more or less likely to respond to these messages?
 - Why?
- How else do you think these messages might impact fishers, apart from their likelihood of wearing a PFD?

AOBs and close

- Has there been anything you've seen which has helped fishers to change their attitude towards wearing PFDs?
 - [If yes] What has this involved?
- Why do you think this changed fishers' attitudes?
- What else do you think would be helpful for fishers to wear PFDs / skippers to encourage their crew to wear PFDs?
 - [If yes,] why?

That concludes all of our questions. Is there anything we haven't asked about that you think is important for us to know?

Do you have any questions or other comments?

[Thank the participants for their time - provide contact details in case they would like to follow up with researchers]

Annex 2: Campaigns shown during interviews.

Community campaigns

Figure 3: Home and Dry campaign poster¹⁸



Figure 4: Home and Dry campaign poster¹⁹



¹⁸ Retrieved from: <https://www.homeanddry.uk/>

¹⁹ Retrieved from: <https://www.homeanddry.uk/>

Informational campaigns

Figure 5: RNLI's 'I am your Lifejacket' campaign²⁰



I am your Lifejacket.
 When we are on the water,
 I will make you feel safe.
 And when we are in the water,
 I will keep you alive.
 I will stop you from panicking.
 I will keep you afloat.
 Even in rough weather.
 Even if you are unconscious.
 I will support and protect you
 until help arrives.
 All this I will do for you
 if you do one thing for me.
Please, put me on.


 Lifeless
 unless worn
rnli.org.uk/lifeboats


Lifeboats

A charity registered in England and Wales (201588) and Scotland (SC017081) Charity number: 049 3075 for the Republic of Ireland.

²⁰ Retrieved from: <https://rnli.org/safety/respect-the-water/water-safety-resources/personal-floatation-devices-resources>

Figure 6: 'You have 10 minutes' Lifejackets for Lobstermen campaign ²¹



**YOU HAVE
10 MINUTES.**

In cold water, that's how long you have to rescue your crewman before they lose the ability to keep their head above water.
Keep yourself safe, keep your crewmembers safe.
The clock's ticking without a lifejacket.

**WE'VE LOST A LOT OF GOOD
LOBSTERMEN OVER THE YEARS.
EQUIP YOUR CREW AND YOURSELF
WITH COMFORTABLE LIFEJACKETS.**

**NEC LIFEJACKETS
for LOBSTERMEN** 
NORTHEAST CENTER FOR OCCUPATIONAL HEALTH & SAFETY

**www.facebook.com/LifejacketsforLobstermen/
or call us to learn more 607-221-4448**

²¹ Retrieved from: <https://necenter.org/portfolio/lifejackets-for-lobstermen/>

Figure 7: 'A good crew is hard to find,' Lifejackets for Lobstermen campaign ²²

A GOOD CREW IS HARD TO FIND

ESPECIALLY IF THEY'RE AT THE BOTTOM OF THE OCEAN.

Yes, these are flotation devices!

WE'VE LOST A LOT OF GOOD LOBSTERMEN OVER THE YEARS. EQUIP YOUR CREW AND YOURSELF WITH COMFORTABLE LIFEJACKETS.

www.facebook.com/LifejacketsforLobstermen/ or call us to learn more 607-221-4448

NEC LIFEJACKETS for LOBSTERMEN
NORTHEAST CENTER FOR OCCUPATIONAL HEALTH & SAFETY

²² Retrieved from: <https://necenter.org/portfolio/lifejackets-for-lobstermen/>

Figure 8: 'Not just a life preserver, a legacy preserver,' Lifejackets for Lobstermen campaign ²³



**NOT JUST A LIFE PRESERVER.
A LEGACY PRESERVER.**

Lifejackets. They're not cork anymore. Now lighter, less bulky, and easier to work in. Put on your lifejacket and preserve your legacy. Help keep a good thing going.

Yes, they are all wearing flotation devices!

WE'VE LOST A LOT OF GOOD LOBSTERMEN OVER THE YEARS. EQUIP YOUR CREW AND YOURSELF WITH COMFORTABLE LIFEJACKETS.

**www.facebook.com/LifejacketsforLobstermen/
or call us to learn more 607-221-4448**

NEC LIFEJACKETS for LOBSTERMEN
NORTHEAST CENTER FOR OCCUPATIONAL HEALTH & SAFETY

²³ Retrieved from: <https://necenter.org/portfolio/lifejackets-for-lobstermen/>

Annex 3: Fisher characteristics

Characteristic	Description	Ports			Total
		South-West (Mevagissey, Looe, Dartmouth)	South-East (Shoreham, Eastbourne, Whitstable)	North-East (Seahouses, Whitby)	
Years of Experience	0-5	0	2	0	2
	6-10	0	1	0	1
	10-20	7	2	0	9
	21+	4	7	2	13
	<i>Not known</i>	4	2	2	8
Role	Skipper/ Owner	11	10	1	22
	Hired skipper	0	2	0	2
	Non-skipper	2	1	1	4
	<i>Not known</i>	2	1	2	5
Type of vessel	<10m	8	8	4	20
	>10m	2	1	0	3
	<i>Not known</i>	5	4	0	9

Type of crew	Consistent	5	3	3	11
	Inconsistent	1	1	0	2
	No crew	2	8	0	10
	<i>Not known</i>	5	2	1	8
Experience with 'man overboard' course	Experienced	0	0	2	2
	Not experienced	3	3	0	6
	<i>Not known</i>	11	11	2	24