



STAYING SAFE AT SEA

POLICY BRIEF NO. 9 - FEBRUARY 2021

OVERVIEW

- Commercial fishing is the most dangerous profession in the UK.
- Going overboard, flooding and capsizing are the leading causes of fatalities within the fishing industry.
- The majority of fishing accidents are considered preventable.
- Innovative technological developments, updated legislation, and effective outreach and education programmes are all key to enhancing fishermen's safety at sea.
- More work needs to be done to effectively implement existing prevention methods, as well as develop further innovative measures.

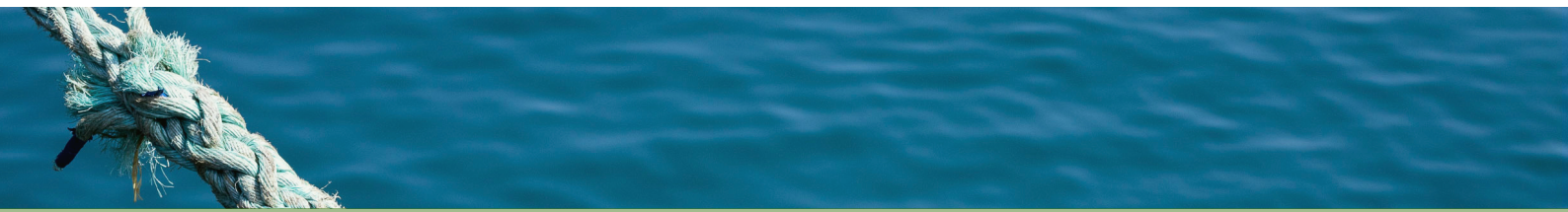
THE ISSUE AT HAND

The risk of fatality faced by fishermen is over six times higher than that of the most dangerous land-based industry (1).

The potential benefits of proximity to shore and operation in calmer waters enjoyed by the inshore fleet are often outweighed by the lack of regulation and safety precautions in place for smaller vessels.

As such, the risks faced by fishermen in the inshore fishing sector is often considered greater than that for larger, offshore vessels.

Despite the perception of this risk as 'inherent' to the industry, a high proportion of the fishing accidents that occurred between 2010 and 2020 could have been prevented by increased risk awareness, updated technology, and appropriate legislative support (2).



This briefing summarises the output from the APPG on Fisheries open Parliamentary webinar, 1 December 2020. The meeting brought together a diverse array of stakeholders from across the UK to discuss efforts to improve fishing safety. This document is a synthesis of the discussions that took place both at the event and online (via #SafetyatSea).

THE ROLE OF LEGISLATION

The most significant recent legislative change made to fishing safety in the UK is the introduction of the International Labour Organization's work in fishing convention (ILO 188), which was ratified in 2019 (3). As well as establishing a baseline of acceptable working conditions, ILO 188 outlines the minimum requirements for health and safety onboard, including a vessel risk assessment, written work agreements, valid medical certificates and, usually, wearing Personal Flotation Devices (PFDs) onboard (4). Since the introduction of ILO 188, failure to take adequate measures to secure the health and safety of crew is a criminal offence, and failure to wear a PFD when provided with one may incur a fine.

Following an incident in 2019, skipper Reegan Green attributed his safe recovery after falling overboard to the fact that he was wearing a PFD, and to his crew closely following safety guidelines, demonstrating the importance of remaining vigilant and preparing for emergencies (5).

By supporting the implementation of legislation at vessel level, the Maritime and Coastguard Agency (MCA) aims to prevent the loss of life along the coast and at sea. The MCA provides advice and guidance to keep fishing safe and legal, offers training for fishermen to understand new requirements, and supports them towards safer ways of working (6).

Amongst these, a key recommendation from the MCA is for all vessels to have an online Safety Management System in place to comply with legislation and ensure a safe working environment (7). The SafetyFolder app, a free service for fishing vessel owners to manage health and safety systems, is a straightforward way to achieve this (8).

THE ROLE OF OUTREACH

Previous outreach campaigns have achieved limited success in addressing the habitual behaviours that lie at the heart of many safety issues onboard. A survey found that, despite extensive free distribution of PFDs, 50% of people who lost their lives in fishing accidents in 2019 had not been wearing a PFD at the time of the incident (9). Promoting and embedding behavioural change could therefore have a significant impact on reducing the number of fishing fatalities annually.

Lack of efficacy of past outreach campaigns has been attributed to their limited national coordination for outreach and an emphasis on the risks of not following safety guidelines, rather than the benefits of being safety-conscious.

The Fishing Industry Safety Group (FISG) is aiming to transform the effectiveness of outreach campaigns.

Home and Dry is a national fishing safety campaign, coordinated by FISG, that uses positive messaging and compelling imagery to encourage a conscientious approach to fishing safety (5). Although the campaign was well-received by the fishing industry, it highlighted the need to engage with fishermen face-to-face as well as via radio and online media. As a large percentage of fishermen do not have an online presence, a mixed campaign approach is needed in order to maximise impact.



The value of in-person engagement has been demonstrated by Seafood Cornwall Training, a regional programme working with skippers in the South West of England. They engage with fishermen and vessel owners through meetings on the quayside, workshops and presentations, lifejacket roll-out events, and directions to online resources (10). Since its inception in 2009, Seafood Cornwall Training reported having observed an increasing proportion of Cornish fishermen wearing PFDs, and an increased awareness of safety best practice in general (11).

THE ROLE OF INNOVATION

Tech developers and fishermen are taking innovative steps to enhance safety at sea, working to provide technological solutions that can prevent fishing accidents or improve search and rescue operations.

Incident Prevention

Unstable vessels are the leading cause of death amongst commercial fishermen, accounting for 57% of all fishing deaths (12). The ability of a vessel to regain an upright position after being displaced by wind or rain is affected by a number of short- and long-term factors. Fuel burn and cargo shift can affect a vessel's weight distribution over the course of a voyage, while 'weight creep' resulting

from vessel modifications may affect its composition over the course of its lifespan (13). To enable skippers to easily monitor this, Hook Marine have developed the SeaWise Stability Monitor, an onboard device which registers fluctuations in vessel stability throughout voyages, alerting skippers when the vessel's centre of gravity reaches a dangerous threshold and allowing them to take remedial action or, in severe cases, broadcast a mayday message (14).

Search and Rescue

The technology behind search and rescue beacons has seen significant advances in recent years. Greater location accuracy, increased local awareness thanks to widespread use of Advanced Information Systems (AIS) on vessels, and the ability to signal back to those in distress have all heralded a sea-change in the efficacy of search and rescue devices, such as those produced by Orolia Maritime (17).

Despite this, a lack of effective education on new technologies means that the majority of UK vessels still use out-dated beacons, and there is currently no legislation to make innovative new technology a legal requirement. Concerted outreach efforts, supported by updated legislation, could work to change this and significantly increase the efficiency of search and rescue missions.

RELIANCE III: INNOVATION ON BOARD

Not all innovation is reliant on digital technology. Proactive skippers have found novel ways to enhance safety measures onboard their vessels to the benefit of themselves and their crew, often going above and beyond minimum legal requirements.

Skipper John Clark fitted his new vessel, Reliance III, with a range of modifications designed to prevent accidents at sea (15). To increase safety around machinery, John installed a winch with **hydraulic brakes** and **kill switches**, allowing for their quick suspension in the event of an incident. He also installed **guards over all moving machinery** - something which is not currently required by law. To prevent man overboard incidents, John installed a prototype **safety rail**, painted yellow and clearly visible, which runs the length of the sheltered side of the vessel and allows for crew to be attached via a moveable safety line connected to their PFD. Each section of the rail is between two and three metres in length and can support up to four crew members at a time, making it easy to use and unobtrusive to fishing effort. A **safety harness with a bungee rope** was also installed below deck to protect crew as they wait for the trawl door to come up, ensuring that crew are still attached to the boat in the event they fall overboard (16).

SUMMARY

In ratifying ILO 188, the UK has made a national commitment to improve the safety of its fishing fleet (3). To consolidate the benefits of steps already taken to enhance safety at sea, it is now crucial to work with fishermen to demonstrate how and why they should introduce them to their vessels. The provision of financial support to install new safety equipment, coordinated outreach campaigns to raise awareness, and collaborative partnerships between fishing industry representatives and regulators are all possible ways to achieve this.

Moving forward, greater emphasis must be placed on making safety measures more proactive. While responsive measures can save lives, understanding vessel stability, taking steps to prevent man overboard, and looking at the root cause of fishing accidents could significantly diminish the risk of incidents occurring in the first place.

The landscape of fishing safety in the UK has seen significant improvements over recent years. Nonetheless, there is ample space for innovative new ideas, nationally coordinated outreach programmes, and stronger safety legislation to come together and consolidate progress, making the fishing industry as safe as possible.

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