



# Precision Fishing in the UK

## Opportunities & Challenges

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# Precision fishing?

## Precision Fishing enables economically and environmentally healthy fisheries

**\$53bn**  
profits<sup>1</sup>

**\$11bn**  
cost savings<sup>2</sup>

**9.1m tons**  
species saved  
per year<sup>3</sup>



Fishers definition - Catch what you need to catch, avoiding everything else and using the least amount of resources.



**Revenue increase**



**Fuel costs and CO<sup>2</sup> decrease**



**Sorting time decrease**



**Avoidance of fines**



**Retain fishing rights**



**Simple regulatory compliance**

### Precision Fishing

OBSERVE

CatchCam

MEASURE

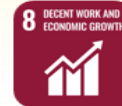
Enki

RESPOND

Pisces

Enhanced  
Biodiversity

Sustainable Blue  
Economy



# Current status in the UK

- It is not a bed of roses!
- UK Gear Forum tasked Cefas to carry out a survey of current state of play with adoption of best practice
  - Lack of incentives
  - Regulatory barriers
  - Can't afford (\$) to take risks
  - Lack of information
  - Not 1 size fits all.



# Vessels of the Future

- Much of our fleet is old
- Electric vessels
  - Propulsion
  - Winches
  - Only suitable for day vessels at present
- Drive for efficient design
- Automation with vessels resembling factories



**FIS** Fisheries  
Innovation &  
Sustainability

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## VESSELS OF THE FUTURE

WHAT IS 'VESSELS OF THE FUTURE'?

We are investigating opportunities for alternatively powered fishing vessels in the UK, with the objective of ensuring no sector of the fleet is left out of a truly just transition to low-carbon fishing. This includes collaborating with fishermen, vessel designers, engineers, regulators and other key stakeholders in the fishing industry, to discover how FIS can best support the industry and make real impact on the path to net zero.

VESSELS OF THE FUTURE  
NEWS

WORKSHOP  
REPORTS

CONCEPT DESIGNS – NET ZERO  
VESSELS

# Gear selectivity

- UK Gear Forum
- Fishing Gear database
- Project UK (FIPS)
- Smart Trawl
- Traps & Baits
- **Lack clear policy**



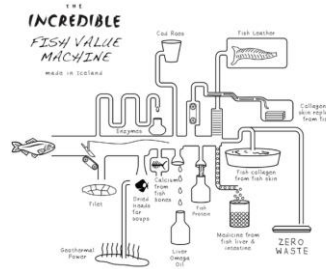
# Gear Efficiency & Impact

- Sumwing
- Scallop Dredge
- Katchi
- Semi-pelagic doors



# Catch Welfare & Precision Fishing

- Crustacea Compassion
- Open Seas
- Nephrops tailing project
- 100% utilisation



## Show langoustines some love this Valentines Day

Langoustines are routinely "tailed" at sea, a practice that involves ripping their tails off, whilst alive and fully conscious. These tails are then sold as scampi.

Our #CloseTheLoophole campaign calls on the government to protect all decapod crustaceans once and for all, but including them in the existing Animal Welfare Act and issuing guidance for fishing vessels. **But we need your help.**

Please show these vulnerable animals some love by [signing our petition now](#).

**TAKE ACTION TODAY**



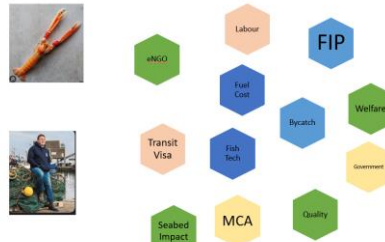
## BOTTOM DRAGGING.

Scotland's coastal fisheries are focused on shellfish. Scallops and Nephrops (otherwise known as Dublin Bay prawns, langoustine or Norway lobster – we'll call them prawns), caught mostly for the European export markets, make up the majority of fish and shellfish coming from this area. Although both species can be caught in a few different ways, most scallops are caught by dredging, and most prawns are caught from bottom trawling, normally otter or twin rig.

Dredging and bottom-trawling are unsustainable, whether because of the scale and impact of the direct damage they cause to the seabed or through the knock-on impact of suppressing recovery of fish populations due to bycatch. We explore these impacts in detail below.

This unsustainability has been widely accepted for a long time, but neither Scottish Government nor the seafood and fishing industries appear able or willing to resolve the issues. Here are just a handful of occasions when they have committed to change and then failed to follow through:

## Live Projects – Nephrops



This is not just food this is →

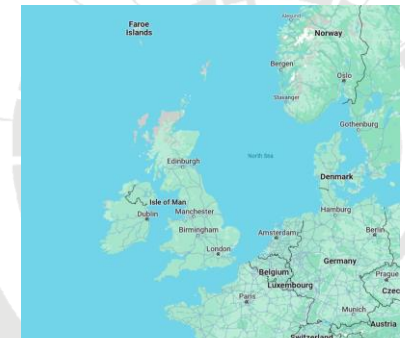
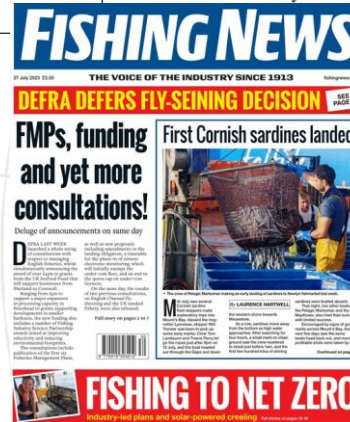


## Collaboration partners



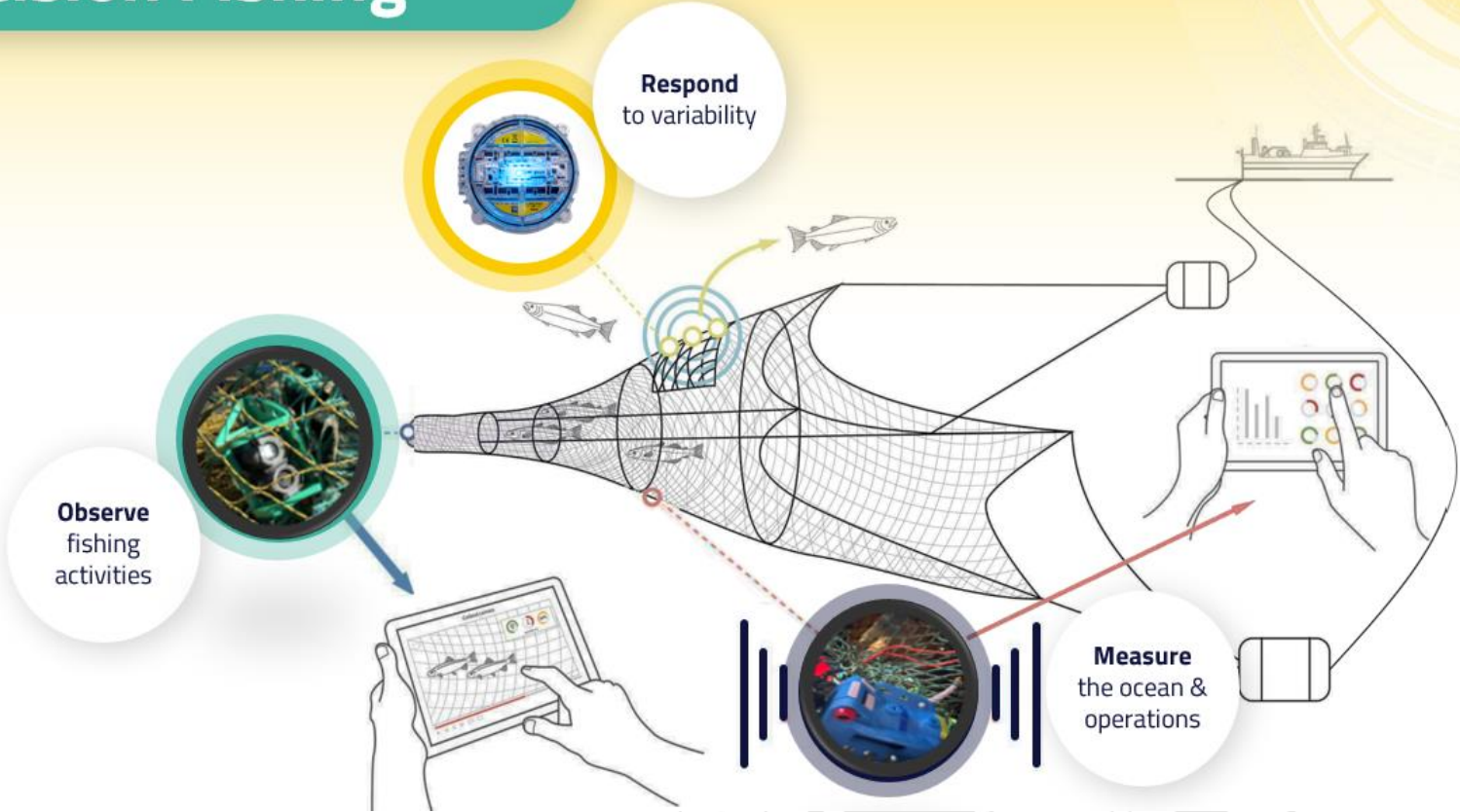
# Policy & direction of travel

- Devolved nature of fisheries
- Co-management
- Fisheries Management Plans (43)
- We must work with our neighbours



# SafetyNet Technologies

## Precision Fishing



# Precision Fishing at SafetyNet Technologies

- Operational efficiency



CatchCam underwater fishing camera



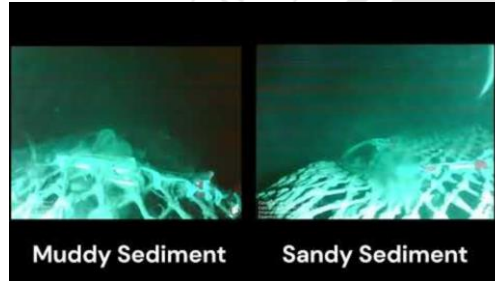
SeaSensor fishing oceanographic sensor

# Precision Fishing at SafetyNet Technologies

- Operational efficiency
- Ecological efficiency
- Present the facts



<https://youtu.be/O4nAnfH0zzs>



<https://youtu.be/ieYJtYVlgpl>



<https://youtu.be/1DnWHZU-ZF8>



# Thank you & Questions

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