

# **Improving inshore fisheries data: Consultation on requiring electronic tracking and monitoring technology on under 12 metre commercial fishing vessels**

**August 2023**

# Contents

Introduction	Page 4
Context	Page 5
Modernising the inshore fleet	Page 6
Proposals	Page 9
Questions	Page 12

## **Responding to this Consultation**

We are inviting responses to this consultation by 7 November 2023.

Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space (<http://consult.gov.scot>). Access and respond to this consultation online at <https://consult.gov.scot/marine-scotland/improving-inshore-fisheries-data>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 7 November 2023.

If you are unable to respond using our consultation hub, please complete the Respondent Information Form to:

Inshore Fisheries Management  
Marine Directorate  
Scottish Government  
Area 1B North  
Victoria Quay  
Edinburgh  
EH6 6QQ

## **Handling your response**

If you respond using the consultation hub, you will be directed to the About You page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and Environmental Information (Scotland) Regulations 2004, and would therefore have to consider any request made to it under that legislation for information relating to responses made to this consultation exercise.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document.

To find out how we handle your personal data, please see our privacy policy: <https://beta.gov.scot/privacy/>

## **Next steps in the process**

Where respondents have given permission for their response to be made public, and after we have checked that they do not contain any potentially defamatory material,

responses will be made available to the public at <http://consult.gov.scot>. If you use the consultation hub to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available relevant information and evidence. Responses will be published where we have been given permission to do so. An analysis report will also be made available.

### **Comments and complaints**

If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or to [inshore@gov.scot](mailto:inshore@gov.scot).

### **Scottish Government consultation process**

Consultation is an important part of the policy making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.gov.scot>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

# Introduction

1. Scotland's fishing industry plays an important role in our culture, our economy and our rural and island communities. The diverse, high quality seafood landed by our fishers provides a healthy and sustainable food source, both nationally and internationally. Scotland's inshore waters contain a multitude of commercially fished species including *Nephrops*, scallops, crab, lobster, cod, haddock and mackerel. Around 80% of our approximately 2,080 registered fishing vessels are primarily engaged in these fisheries in inshore waters.<sup>1</sup>
2. The Scottish Government is committed to the sustainable management of this diverse sector, supporting its resilience and coexistence with other users of our shared marine space. At a time of increasing competition for this marine space, it is important that we balance our commitments to net zero, protection of the marine environment, energy security and food security, and thriving communities.
3. Scotland's National Marine Plan (NMP) provides the guiding framework for sustainable management of marine activities and resources in Scottish waters.<sup>2</sup> The NMP reflects the vision set out in the UK Marine Policy Statement for 'clean, healthy, safe, productive and biologically diverse oceans and seas' and also our commitment to achieve Good Environmental Status for UK waters.<sup>3, 4, 5, 6</sup>
4. Our Blue Economy approach will frame management of Scotland's marine environment to 2045, with our Fisheries Management Strategy (FM Strategy) as one of its cornerstones.<sup>7</sup> The FM Strategy sets out a vision for Scotland to be a world class fishing nation delivering responsible and sustainable fisheries management, enabling access to high protein, low carbon food. It sets out our approach to managing Scottish sea fisheries in a way that balances environmental, social and economic interests; working in partnership with our stakeholders to deliver the best results for the future of our marine environment, our fishing industry and the communities that rely on them.
5. A key action in the FM Strategy is to use existing tools and emerging technology to improve our knowledge base and improve management in our waters. We recognise that there is more that can be done to improve data on inshore fishing vessels' activity. Such data would help us to manage fisheries sustainably for the future, deliver enhanced marine environmental protection, improve control and enforcement tools and, better inform spatial planning decisions.

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<sup>1</sup> [Scottish Sea Fisheries Statistics: 2021](#)

<sup>2</sup> [Scotland's National Marine Plan - gov.scot \(www.gov.scot\)](#)

<sup>3</sup> [UK marine policy statement - GOV.UK \(www.gov.uk\)](#)

<sup>4</sup> [Marine strategy part one: UK initial assessment and good environmental status - GOV.UK \(www.gov.uk\)](#)

<sup>5</sup> [Marine strategy part two: UK marine monitoring programmes - GOV.UK \(www.gov.uk\)](#)

<sup>6</sup> [Marine strategy part three: UK programme of measures - GOV.UK \(www.gov.uk\)](#)

<sup>7</sup> [Delivering Scotland's Blue Economy approach - gov.scot \(www.gov.scot\)](#)

6. This consultation seeks stakeholder views on the use of vessel tracking (also called i-VMS) and inshore Remote Electronic Monitoring (REM) technologies to better understand the distribution and activity of inshore commercial fishing vessels under 12 metres in length.
7. The use of tracking and inshore REM technology on such vessels is not considered to have direct environmental, social or economic impacts on Scotland's marine environment. However, the proposals in this consultation align with the General Policies and Sea Fisheries Policies as set out in the NMP. The data generated from using the technology on fishing vessels under 12 metres in length will provide a greater insight into where fishing operations take place and improve the evidence base on which decisions are taken by the Scottish Government and other relevant public authorities.

## Context

8. Currently, tracking devices that transmit or store fishing vessel locations while at sea are generally limited to larger vessels. Since 2012 it has been a requirement for all EU fishing vessels which are 12 metres and over in length to be fitted with a Vessel Monitoring System (VMS).<sup>8</sup> This requirement currently forms part of retained EU law in the UK (subject to certain amendments).<sup>9</sup> VMS transmits vessel positional data to a satellite which then sends it to the relevant fisheries administration who monitor position, course, speed and other parameters. The data generated can be used for fisheries management, environmental protection and to identify key fishing areas in marine planning.
9. REM systems can support more comprehensive data collection in fisheries, using imagery, sensors and global positioning systems (GPS) to independently monitor operations at sea, such as effort and catch. The components of REM systems can differ depending on the monitoring, control and surveillance objectives for which they are used, and do not necessarily need to include the use of cameras.
10. In Scotland, the majority of vessels less than 12 metres in length (most of which fish predominantly within inshore waters) are not currently required to carry on-board tracking devices or REM systems. As such, our understanding of the activities of these vessels operating in Scottish waters (or Scottish vessels operating outwith Scottish waters) is limited. Some information can be derived about location of catch through statutory returns (logbooks, FISH 1 forms and sales notes), but this is gathered retrospectively, and there is no means of verifying its accuracy.

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<sup>8</sup> See Article 9 of retained [Council Regulation \(EC\) No 1224/2009](#) of 20 November 2009 establishing a Union control system for ensuring compliance with the rules of common fisheries policy (legislation.gov.uk)

<sup>9</sup> See [Part 3 \(4\) of The Common Fisheries Policy \(Amendment etc\) \(EU Exit\) Regulations 2019](#) (legislation.gov.uk)

11. Improving the monitoring of inshore fishing vessels is an important component in assuring compliance with regulations, including spatial restrictions, such as MPAs. In addition, the scientific data available in relation to shellfish stocks varies spatially, and there is limited data in relation to fishing effort and its spatio-temporal distribution (e.g. the quantity and location of fishing gear in the water, and its seasonal deployment). Onboard vessel tracking devices and REM systems offer opportunities to greatly improve this evidence base.
12. In July 2023 the Scottish Government published outcome reports for consultations on a Future Catching Policy (FCP) and the use of REM systems on certain fleet segments.<sup>10, 11</sup> The FCP consultation covered a range of fisheries management proposals, many aimed at addressing long-running operational issues with the landing obligation, which bans the discarding of fish. It also sought views on the introduction of creel limits for static gears. Whilst the REM consultation was focused on the pelagic and scallop dredge fleet, it recognised the need to take a tailored approach to tracking and monitoring solutions.<sup>12</sup> These policies, coupled with this consultation, are interlinked and form important steps in ensuring that fishing activity within Scottish waters is carried out sustainably and responsibly.

## Modernising the Inshore Fleet

13. In modernising the inshore fleet via the use of electronic technologies, the Scottish Government is considering a spectrum of solutions ranging from simple tracking devices to more sophisticated REM systems suitable for use on smaller vessels. We want to ensure that the approach taken in rolling-out these systems is proportionate, recognising the diversity of the fleet. Whilst the majority of inshore vessels fish with pots, creels and traps, other fishing methods include trawling, dredging, hand-lining, netting, diving, and vessels that are multi-purpose and change fishing method during the year to maximise opportunities.
14. We consider that for most of our inshore commercial fishing vessels a simple tracking device will most likely be suitable. This will record the location, speed and heading of a vessel using a secure tamper resistant system. We are mindful of simplicity of use and cost-effectiveness for both regulator and user. To that end, it is envisaged that data will be transferred using mobile telephone technology (as opposed to the satellite technology used to transfer VMS data). Using this approach, transfer of data will happen automatically and where there is no signal the device will store data and transmit it when in range.
15. While simple tracking devices will suit most under 12 metre fishing vessels, the Scottish Government's view is that for some, more sophisticated REM systems would deliver additional compliance and scientific benefits. We anticipate this

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<sup>10</sup> [Future Catching Policy Outcome Report](#)

<sup>11</sup> [REM - Scottish Government Response to Consultation](#)

<sup>12</sup> [Ensuring Long Term Sustainability from Scotland's Marine Resources - Remote Electronic Monitoring \(REM\): Consultation \(www.gov.scot\)](#)

approach would be taken for a small percentage of vessels in the under 12 metre fleet, that would be known as REM fleets. These systems would comprise GPS, sensors and, where appropriate, imagery, to support the collection of additional data on fishing activity and/or catches. As with tracking devices, we anticipate that data would be transferred using mobile phone technology to reduce costs.

16. From a compliance perspective, REM fleets could comprise vessels selected on a risk-based approach, for example in relation to fishing location, target species or gear in use. From a scientific evidence perspective, the majority of our inshore commercial fishing vessels target non-quota stocks that are not currently subject to catch or effort limits. Using REM on a number of active inshore vessels would be a good way to improve monitoring and management of these stocks. Vessels could be selected based on catch volume, catch rate; or based on spatial considerations such as areas of high fishing intensity.

## Existing Use of Vessel Tracking and REM on under 12 metre boats in Scotland

17. The Scottish Government has already worked with industry to test a number of vessel tracking solutions focussed on the static gear vessels (catching crab, lobster and *Nephrops*) that dominate the inshore fleet. A particular example is our creel limitation pilot in the Outer Hebrides which involves trialling a low-cost vessel tracking solution developed under the University of St Andrews Scottish Inshore Fisheries Integrated Data System (SIFIDS) programme.<sup>13, 14</sup>
18. Some vessels that dredge for scallops in Scottish waters are already required to carry REM systems that include GPS, winch sensors and cameras.<sup>15</sup> The Scottish Government uses the data generated from these systems to confirm that a vessel is not exceeding prescribed dredge numbers in Scottish territorial waters as well as ensuring adherence to the rules governing marine protected areas (MPAs). The wider Scottish scallop dredge sector has acknowledged the value of using REM in demonstrating responsible fishing practices, optimising co-existence with other marine users and proactively feeding into marine planning processes. Positive dialogue with the Scottish Government led to the majority of the Scottish sector, including inshore under 12 metre vessels, adopting REM systems on a voluntary basis. We intend to introduce legislation that will make this technology mandatory on all scallop dredge vessels in Scottish waters.
19. We have also been working with industry to trial other REM systems designed for smaller vessels, using a combination of GPS, different sensors and, where relevant, cameras.

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<sup>13</sup> [Outer Hebrides Inshore Fisheries Pilot Area](#)

<sup>14</sup> [Outer Hebrides Inshore Fisheries Pilot: year one report](#)

<sup>15</sup> [The Regulation of Scallop Fishing \(Scotland\) Order 2017 \(legislation.gov.uk\)](#)



## Objective of modernising the inshore fleet

20. The objective of using vessel tracking is to improve understanding of where under 12 metre vessels are fishing. The data generated will enable more efficient decision making and responsive inshore fisheries management by informing the Scottish Government's fisheries and wider marine policy development, enhancing the inshore fisheries evidence base and provision of scientific advice, and gathering intelligence for enforcement purposes.
21. In addition, the objective of a limited use of REM systems on under 12 metre vessels is to provide additional science and compliance benefits. By doing this, we will improve:
  - i. Our knowledge of key stocks, in particular shellfish.
  - ii. Our knowledge of the amount of static gear in the water which can be used to support scientific advice.
  - iii. Efficiency in monitoring compliance with spatial management measures, including MPAs.
  - iv. Wider policy development (such as introducing creel limits, as discussed in the FCP consultation).
22. The high resolution data from vessel tracking and inshore REM would also be valuable for our fishers and the fishing industry. For example, it would:
  - i. Demonstrate evidence of fishing activity for the purposes of informing decision making in relation to the shared marine environment, such as offshore renewable developments and aquaculture licensing.
  - ii. Improve the marketability of produce by providing consumers with accurate information on catch locations, which may improve their confidence when purchasing seafood.
  - iii. Help to prevent and resolve conflicts at sea which can arise as a result of gear positioning, and in doing so avoid or reduce associated business disruption.

## Use of inshore vessel tracking in the UK

23. In developing our inshore vessel tracking and REM policies, the Scottish Government is working closely with other UK administrations to seek as much alignment across the four nations as possible.
24. Inshore vessel tracking programmes are also being developed by other UK Fisheries Administrations:
  - i. In relation to English registered under 12 metre fishing vessels the Marine Management Organisation (MMO) is currently phasing in the installation of type-approved vessel tracking devices. Legislation will then make it mandatory for all under 12 metre fishing vessels transiting or fishing in English

- waters to have a functioning tracking device on-board that transmits information to the MMO at least once in every three minute period.<sup>16</sup>
- ii. In 2022, the Department of Agriculture, Environment and Rural Affairs in Northern Ireland consulted on proposals for vessel tracking devices on all licensed fishing boats under 12 metres in length operating in Northern Irish waters and to Northern Ireland registered vessels operating outside Northern Irish waters.<sup>17</sup>
  - iii. Since February 2022, all under 12 metre commercial fishing vessels operating within Wales and the Welsh zone, and Welsh under 12 metre registered fishing vessels wherever they are operating, have been required to have a functioning tracking device on board that transmits information (including the geographical position, date, time, speed and course of the vessel) to the Welsh Authorities at least once in every ten minute period.<sup>18</sup>

## Proposals

25. The Scottish Government intends to require an appropriate vessel tracking device on board all under 12 metre commercial fishing vessels transiting or fishing within the Scottish zone, and Scottish under 12 metre registered fishing vessels wherever they are operating, by 2026.
26. In addition, for under 12 metre vessels where there are clear scientific and compliance benefits, we intend to require an REM system. Once the responses to this consultation have been analysed, we will engage further with our Fisheries Management and Conservation Group (FMAC) and Regional Inshore Fisheries Group network (RIFG) to identify the REM fleets.
27. We intend to utilise a variety of technologies to ensure that the requirement is proportionate to each vessel's fishing activity, while balancing costs. It is the Scottish Government's intention to contribute to the cost of a Scottish vessel's (under 12 metres in length) first tracking device or REM system, subject to budgetary constraints. The Scottish Government does not intend to contribute to additional expenses, including monthly running costs.
28. In order to support a tailored and phased deployment of the technology, the requirement to have a tracking device or REM system onboard may be introduced initially via licence conditions, before legislation is laid in the Scottish Parliament. The use of licence conditions would enable Ministers to phase in the requirements which would allow them to balance demand from fishers with supply of devices and availability of engineers to fit them. It would also ensure that data collection starts as soon as possible. For example, vessels could be allocated into tranches based on their length or another parameter. A deadline could be set for the vessels in each tranche to have an installation completed by.

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<sup>16</sup> [Inshore Vessel Monitoring \(I-VMS\) for under-12m fishing vessels registered in England - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

<sup>17</sup> [Consultation Document proposed introduction of IVMS Northern Ireland.pdf \(nidirect.gov.uk\)](#)

<sup>18</sup> [The Sea Fishing Operations \(Monitoring Devices\) \(Wales\) Order 2022](#)

A licence condition could be introduced to make it a mandatory requirement for that class of vessel. The subsequent tranches would follow the same process.

29. The intention is that the legislative requirements would apply to all fishing boats under 12 metres in length transiting and operating in Scottish waters (the Scottish zone) and to Scottish registered under 12 metre vessels wherever they operate. In practice this means that the requirements would be applied to all under 12 metre vessels in Scottish waters, regardless of nationality.

## Respondent Information Form

**Please Note** this form **must** be completed and returned with your response.

To find out how we handle your personal data, please see our privacy policy:  
<https://www.gov.scot/privacy/>

Are you responding as an individual or an organisation?

- Individual  
 Organisation

Full name or organisation's name

Phone number

Address

Postcode

Email Address

The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:

- Publish response with name  
 Publish response only (without name)  
 Do not publish response

### Information for organisations:

The option 'Publish response only (without name)' is available for individual respondents only. If this option is selected, the organisation name will still be published.

If you choose the option 'Do not publish response', your organisation name may still be listed as having responded to the consultation in, for example, the analysis report.

We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you again in relation to this consultation exercise?

- Yes  
 No

## Questionnaire

Question 1:

What is your opinion on the proposal to require a tracking device on all under 12 metre commercial fishing vessels transiting or fishing within the Scottish zone, and Scottish registered under 12 metre fishing vessels wherever they operate?

Agree

Don't know

Disagree

Please explain your answer...

Question 2:

What is your opinion on the proposal that the use of vessel tracking devices on under 12 metre commercial fishing vessels should be complemented by the use of Remote Electronic Monitoring (REM) on a number of vessels?

Agree

Don't know

Disagree

Please explain your answer...

Question 3:

What is your opinion on establishing REM fleets of under 12 metre commercial fishing vessels based on the parameters set out in paragraph 16 of the consultation paper (copied below for ease of reference)?

“16. From a compliance perspective, REM fleets could comprise vessels selected on a risk-based approach, for example in relation to fishing location, target species or gear in use. From a scientific evidence perspective, the majority of our inshore commercial fishing vessels target non-quota stocks that are not currently subject to catch or effort limits. Using REM on a number of active inshore vessels would be a good way to improve monitoring and management of these stocks. Vessels could be selected based on catch volume, catch rate; or based on spatial considerations such as areas of high fishing intensity.”

Agree

Don't know

Disagree

Please explain your answer...

Question 4:

We consider the high resolution data collected from vessel tracking devices and inshore REM systems to be valuable for fishers and the industry as a whole. Which attributes do you see as being valuable?

- Providing evidence of fishing activity for the purposes of informing decision making in relation to the shared marine environment, such as offshore renewable developments and aquaculture licensing
- Improving the marketability of produce by providing consumers with accurate information on catch locations, which may improve their confidence when purchasing seafood
- Helping to prevent and resolve conflicts at sea which can arise as a result of gear positioning, and in doing so avoid or reduce associated business disruption
- Other effects

Please explain your answer...

Question 5:

Do you agree with the assessment of impacts in the partial Business and Regulatory Impact Assessment?

Yes

No

Please explain your answer and provide evidence to support any statements...

Question 6:

Are there any further vessel tracking matters relating specifically to inshore fishing that should be considered as part of this consultation?

Yes

No

Please explain your answer...

Question 7:

Are there any further REM matters relating specifically to inshore fishing that should be considered as part of this consultation?

Yes

No

Please explain your answer...



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