

Explanatory Memorandum to the Sea Fishing Operations (Monitoring Devices) (Wales) Order 2022

This Explanatory Memorandum has been prepared by ESNR ERA Marine and Fisheries and is laid before Senedd Cymru in conjunction with the above subordinate legislation and in accordance with Standing Order 27.1

Minister Declaration

In my view, this Explanatory Memorandum gives a fair and reasonable view of the expected impact of the Sea Fishing Operations (Monitoring Devices) (Wales) Order 2022. I am satisfied that the benefits justify the likely costs.

Lesley Griffiths
Minister for Rural Affairs and North Wales, and Trefnydd

27 January 2022

PART 1

1. Description

1.1. The Order prohibits:-

- licensed fishing boats of less than 12 metres in length from undertaking fishing operations in Wales or the Welsh zone, and
- Welsh fishing boat of less than 12 metres in length from undertaking fishing operations (wherever that boat may be), without an operating vessel monitoring systems (VMS) and requires transmission of certain information (including the geographical position, date, time, speed and course of the vessel) to the Welsh Ministers at least once in every 10 minutes whilst undertaking fishing operations.

2. Matters of special interest to the Legislation, Justice and Constitution Committee

2.1. Notification in accordance with Article 496(3) of the Trade and Cooperation Agreement was given on 20th October 2021.

3. Legislative background

3.1. The Welsh Ministers make the following Order in exercise of the powers conferred by section 5(1) of the Sea Fisheries Act 1968 which are now vested in them.

3.2. Functions under the 1968 Act were originally conferred on UK Ministers. By virtue of article 2 of, and Schedule 1 to, the National Assembly for Wales (Transfer of Functions) Order 1999 the functions exercisable under section 5 of the 1968 Act were transferred to the National Assembly for Wales in so far as exercisable in relation to Wales (acting concurrently with any Minister of the Crown by whom they are exercisable in relation to functions under section 5 relating to the identification and marking of fishing boats). Those functions of the National Assembly for Wales were transferred to the Welsh Ministers by virtue of section 162 of, and paragraph 30 of Schedule 11 to, the Government of Wales Act 2006.

3.3. By virtue of articles 4(1)(c) and 5(1)(c) of the Welsh Zone (Boundaries and Transfer of Functions) Order 2010, functions exercisable under section 5 of the 1968 Act were further transferred to the Welsh Ministers in relation to the Welsh zone (acting concurrently with any Minister of the Crown by whom they are exercisable in relation to functions under section 5 relating to the identification and marking of fishing boats).

3.4. By virtue of section 59A of, and paragraph 2(1) and (2)(c) of Schedule 3A to, the Government of Wales Act 2006, functions exercisable under section 5 of the 1968 Act were further transferred to the Welsh Ministers

in relation to Welsh fishing boats beyond the seaward limit of the Welsh zone (acting concurrently with any Minister of the Crown by whom they are exercisable in relation to functions under section 5(1) and (2)(a) of the 1968 Act).

3.5. The Order is subject to laying only procedure.

4. Purpose and intended effect of the legislation

4.1. The purpose of this order is to improve fisheries monitoring and management.

4.2. Since 2012, there has been a statutory requirement for all European fishing vessels over 12 metres in length to have a functioning VMS on board (Council Regulation (EC) No 1224/2009). This Regulation became Retained EU law following Implementation Completion Day. In 2012 legislation was also introduced requiring all fishing boats operating in the Welsh scallop fishery to use VMS via the Scallop Dredging Operations (Tracking Devices) (Wales) Order 2012. This Order introduces a similar VMS requirement to that already in place for other vessels.

4.3. Under 12 metre vessels account for approximately 97% of licensed Welsh fishing vessels and currently there is no legal requirement for these vessels to submit information relating to their fishing operations such as location, except in specific circumstances. Generally, there is currently very limited control measures on the under 12 metre fleet, but these are increasing with permit restrictions and further regulation on localised fisheries. The introduction of VMS will create a common requirement for all UK and third country under 12 metre vessels, when fishing in Wales or the Welsh zone.

4.4. The Order will help to address data gaps and will significantly improve the ability of Welsh Ministers to manage fisheries sustainably as well as providing important information to inform wider management of the marine environment. Without this Order there are significant data gaps concerning where the vast majority of commercial vessels fish in Wales and the Welsh zone and the amount of fishing effort they undertake.

4.5. The Order will provide better control and enforcement of fisheries and supplement vessel and shore based patrols. It will enable improved monitoring of the fishing fleet and enable enforcement to operate in a more efficient and targeted manner.

5. Consultation

5.1. A 12-week consultation ran from 8 February 2019 to 3 May 2019 on the proposal to introduce VMS for all UK fishing boats under 12 metres in

length operating in Wales and the Welsh zone and all Welsh fishing boats under 12 metres wherever they are operating.

- 5.2. The consultation was drawn to the attention of key stakeholders, including fishers, industry experts and members of the public. Prior to the consultation, a series of workshops were held throughout Wales. All owners of licensed fishing vessels registered in Wales were invited to the workshops where the proposals were presented and industry was given the opportunity to feedback.
- 5.3. Responses to the consultation were received from 20 respondents. The majority of respondents were in favour of the introduction of VMS (60%), quoting better data to help inform policy and decision making, sustainability, minimising environmental damage and compliance with restrictions as the main benefits. 20% of respondents were against the proposal, 5% were unsure and 15% provided a nil response to this question. Concerns were raised regarding privacy and data protection, practicalities of installing VMS on smaller vessels, costs and the potential for lost fishing time as a result of technical issues. These have been taken into consideration.
- 5.4. Most respondents indicated that VMS was the only feasible, cost-effective option, which would provide reliable data. Some respondents offered alternative solutions, but the same respondents also acknowledged their limitations.
- 5.5. A summary of the consultation responses, including the Welsh Government response and next steps, is available on the Welsh Government website:
<https://documents.hf.wales.gov.uk/id:A26154086/document/versions/published>
- 5.6. The consultation specified that the proposed regulations would apply to UK and Welsh fishing vessels. However, to ensure that all under 12 metre vessels are treated equally and a full picture of fishing activity is obtained, the scope of the Order will cover all under 12 metre vessels licensed to fish in Wales and the Welsh zone.
- 5.7. On 20 October 2021 the European Union was given formal notification of our intention to bring in vessel monitoring requirements under paragraph 3 of Article 496 of the Trade and Cooperation Agreement (TCA).

6. PART 2 – REGULATORY IMPACT ASSESSMENT

- 6.1. This Regulatory Impact Assessment relates to the introduction of a Statutory Instrument which prohibits a licensed fishing boat of less than 12 metres in length undertaking fishing operations in Wales and the Welsh zone, or a Welsh fishing boat wherever that boat may be, unless the boat has a VMS installed and transmits the required information (including the geographical position, date, time, speed and course of the vessel) to the Welsh Ministers at least once in every 10 minute period whilst undertaking fishing operations.
- 6.2. The purpose of the regulations is to gain a full and accurate picture of fishing vessel activity in Welsh waters to improve fisheries and marine environment management. Data related to the spatial and temporal distribution of fishing effort is fundamental to the effective management of fisheries and the wider marine environment, including Marine Protected Areas (MPA) and Marine Planning. Such data does not currently exist for the under 12 metre fishing fleet. This data has become increasingly important as a management tool since the UK left the European Union and will provide better oversight of both UK and foreign fishing vessel activity in the Welsh zone.
- 6.3. Four options have been considered.

7. Options

- 7.1. **Option 1 – BAU (Business as Usual).** This is the ‘do nothing’ option. No new requirements would be brought in and industry would continue to operate as they currently do. Currently, the majority of under 12 metre fishing vessels operating in Wales or the Welsh zone do not need to have a VMS on board and our understanding of their fishing activity is, and would continue to be, very limited.
- 7.2. **Option 2 – Introduce VMS through a Statutory Instrument (SI)**
Introduction of a Statutory Instrument (SI) which requires all under 12 metre licensed fishing vessels operating in Wales or the Welsh zone and all under 12 metre Welsh fishing vessels wherever they are fishing, to carry and operate a functioning VMS. The SI would be introduced using powers available under section 5 of the Sea Fisheries Act 1968.
- 7.3. **Option 3 – Introduce VMS through a licence condition.** Introduction of a licence condition to require Welsh administered fishing vessels to carry a functioning VMS. For this to apply to other UK vessels or non-UK vessels there would need to be agreement with those fishing administrations to include an equivalent condition on their licences.

7.4. Option 4 –Voluntary VMS Scheme. Introduction of a voluntary VMS scheme. Fishers would be encouraged but not mandated to VMS.

8. Costs and benefits

Option 1 - Business as Usual

8.1. Circa 97% of the Welsh fishing fleet are under 12 metres in length. If no changes are made, future management decisions will be made using limited and incomplete information.

8.2. Very little is currently known about the activities of non-UK under 12 metre vessels operating in Wales and the Welsh zone and this would continue to be the case if no change is implemented.

8.3. Information on the catch from under 12 metre vessels is captured through catch returns and sales notes. Catch/sales data only provides part of the picture and alone does not enable effective and sustainable fisheries and marine environment management. Without VMS data it is very difficult to verify catch data or know how much fishing effort has gone into landing the catch or where it occurred.

8.4. It is understood that the other UK and Crown Dependency Fisheries Authorities intend on bringing in similar VMS requirements for their waters. If Wales didn't have a coordinated VMS approach, any Welsh registered vessel that fishes in a nations waters with VMS requirements would need to arrange and self-fund the installation of a VMS device to enable them to comply with the legislation.

Costs

8.5. Direct costs are limited to project resource expended to this point and sunk costs paid to the VMS device supplier to set up the VMS infrastructure and to fit VMS devices onto the Welsh under 12 metre fishing fleet. This is shown in

8.7. Table 1.

8.8. **Error! Reference source not found.** The VMS device procurement, set up and installation costs have been funded through the European Transitions Fund and the European Maritime and Fisheries Fund (EMFF). Staff project costs include both contractor resource funded through EMFF and internal resource funded through Welsh Government overheads.

8.9. There would be no additional ongoing costs to government or industry. Control and Enforcement would continue to operate and deploy resources using existing processes.

Table 1 Option 1 Do nothing - Costs incurred (sunk costs)

Cost element	Cost
VMS device procurement, set up and installation	£554,000
Internal staff project costs	£140,000
Total	£694,000

Benefits

Government

8.10. No ongoing cost commitments.

Industry

8.11. Vessel owners continue with current working practices (i.e. no disruption).

Option 2 – Introduce VMS through a Statutory Instrument (SI)

8.12. Welsh Ministers would introduce vessel monitoring requirements for the under 12 metre fleet through a Statutory Instrument. The Order would apply to all vessels that undertake fishing activity in Wales or the Welsh zone providing a full picture of commercial fishing vessel activity. VMS devices would be offered for free to Welsh under 12 metre fishing boats up to the date the legislation comes into force.

Costs

Government

8.13. The costs to government are shown in Table 2 which cover the following elements:

8.14. The direct cost of purchasing VMS devices for the current Welsh under 12 metre fishing fleet and 3 year warranty with each device. These are sunk costs which have been funded through the European Transitions Fund Exit and the European Maritime and Fisheries Fund (EMFF). Through EMFF, Welsh Government can support industry to comply with the Control Regulations by paying the one off cost of the device and warranty before the Statutory Instrument comes into force.

8.15. The direct cost of paying the data charge for year 1 after legislation comes into force would be paid from the Marine and Fisheries divisional budget.

8.16. Costs to be paid to the VMS supplier for providing the service and helpdesk including database configuration, hosting, security, governance and integration with the UK VMS Hub. Initial set up work funded through EMFF and ongoing hosting costs funded through the

Marine and Fisheries divisional budget for the duration of the contract with the current supplier.

- 8.17. Administrative costs for managing the system. This includes linking device ID's with fishing licence data, dealing with queries, responding to data requests and checking the transmitted data is received correctly. This would be undertaken using existing staff resource.
- 8.18. Staff time for managing the contract with the VMS device supplier and for re-contracting or setting up new process after the current contract expires. This would utilise existing staff resource.
- 8.19. Staff time for undertaking fisheries compliance. This is an ongoing tasks which would continue to be undertaken with the same level of resource. There should be an efficiency gain in outputs due to more targeted deployment of staff and vessels and more compliance able to be done from the office rather than reliance on having staff in the field.
- 8.20. Costs for producing data products such as fishing intensity maps to inform fisheries and marine environmental management (MPA's, Marine planning).

Industry

- 8.21. The costs to the Welsh under 12 metre fishing industry are shown in Table 2 and outlined below. The costs are based on installing and operating VMS on 345 vessels.
- 8.22. Direct cost for payment of annual data charge. Welsh Government will pay the data charge for the first year after the legislation comes into force. After this it will be the responsibility of the owner or master to pay this annual ongoing cost (currently £120 ex vat).
- 8.23. Direct cost for repair or replacement of device. The devices supplied by Welsh Government have a three year warranty to minimise costs to the industry. However, the industry will pay for repair/replacement costs that are outside the scope of the warranty or after the warranty period ends. There is no data available on the track record of the device so a failure rate of 10% year on year has been assumed after the device warranty ends.
- 8.24. The Order requires that a vessel must not undertake any further fishing activity if their VMS device is not transmitting the required information correctly. This could result in an indirect cost to a fisher as they are unable to fish while a faulty/damaged device is repaired or replaced. The VMS devices supplied by Welsh Government are anticipated to have a low failure rate and where faults are experienced it is anticipated that a high proportion will be diagnosed and managed remotely, reducing downtime. Devices with physical damage or where it

is not possible for them to be repaired remotely, are expected to be repaired/replaced within 48 hours.

- 8.25. There is great variability in how active vessels are in the Welsh under 12 metre fishing fleet with fishing activity often dictated by the weather. Some fish full time year round while others are seasonal and part time. The impact on profitability of delaying fishing activity due to a faulty or damaged device will vary. For part time fishers, delaying fishing activity for a couple of days could have little impact, while for others who fish full time the impact could be greater.
- 8.26. Potential profit losses and fixed costs data has been supplied by Seafish for a range of vessel length categories, based on Seafish economic analysis for 2018-2019¹. Less active vessels (vessels that earn less than £10k per year) were removed from the dataset to reduce activity bias on the estimates. The breakdown of this data per vessel category is presented in **Error! Reference source not found.** The average across all vessel lengths and both years has been used in Table 2 to quantify the costs to the industry from lost income due to less days at sea. As there is currently no data available on device reliability a 3% failure rate has been assumed for years 1-3 and 10% has been assumed for year 4 onwards.
- 8.27. There will be a direct cost to any Welsh fishing vessels that joins the under 12 metre fleet after the date the legislation comes into force. They will have to purchase and install a VMS device at their own cost as the EMFF scheme rules preclude Welsh Government from funding devices after legislation is in force. The cost of a replacement device will vary depending on the supplier and device chosen, and may reduce over time as VMS becomes more commonplace and the market becomes more competitive. We expect the costs to range between £400-1500. The calculations in Table 2 assume a device cost of approximately £900.
- 8.28. In future it's considered that the VMS contract model could change to one of 'approved suppliers' where the fisher chooses the device package that works best for them. In this situation it's expected that the device package would include support and hosting and this would be paid directly by the fisher to the device supplier, removing Welsh Government's involvement with this element.
- 8.29. Welsh Government will not supply VMS devices to non-Welsh vessels. Any non-Welsh registered vessels that fishes within Wales or the Welsh zone will have to fund their own device or have it funded by their Fisheries Administration. We are aware that for English vessels the Marine Management Organisation will use EMFF funding to contribute towards the cost of devices for English registered vessels and we

¹ Source: Seafish fleet economic estimates (27/09/2021)

expect that the other devolved administrations will put in place similar VMS schemes.

Costs

Table 2 Option 2 and Option 3 cost summary over 10 years

Cost Element	Sunk Costs	Y1(21-22)	Y2 (22-23)	Y3(23-24)	Y4 (24-25)	Y5 (25-26)	Total Yr 5 horizon	Y6(26-27)	Y7(27-28)	Y8(28-29)	Y9(29-30)	Y10(30-31)	Total Yr 10 horizon
Cost to Government	£694,000	£64,000	£66,000	£53,000	£92,000	£23,000	£298,000	£8,000	£8,000	£8,000	£8,000	£8,000	£337,000
Cost to Industry	£0	£18,000	£59,000	£59,000	£176,000	£176,000	£489,000	£176,000	£176,000	£176,000	£176,000	£176,000	£1,371,000
Total Cost/Investment	£694,000	£82,000	£125,000	£112,000	£269,000	£199,000	£786,000	£184,000	£184,000	£184,000	£184,000	£184,000	£1,708,000
Net Present Value	£694,000	£82,000	£121,000	£104,000	£242,000	£173,000	£721,000	£154,000	£149,000	£144,000	£139,000	£134,000	£1,440,000

* Sunk costs are not included in the total year 5 and year 10 horizons

Table 3 Range of potential profit losses from lost days at sea

Year	Length group	Avg. Days at Sea (days) per vessels	Avg. Net Profit (£'000)*	Avg fixed costs (£'000) (repair&gear excluded)	Profit loss per day of missed fishing (£)**	Profit loss per 48 hour device repair (£)
2018	Total	53	18.4	13.0	£589.4	£1,178.8
	0-6 m	34	5.7	4.2	£293.3	£586.6
	6-8 m	37	8.2	6.2	£383.2	£766.4
	8-10 m	56	20.8	15.8	£652.0	£1,304.0
	10-12 m	108	51.7	32.8	£782.4	£1,564.9
2019	Total	53	15.1	12.9	£525.0	£1,050.1
	0-6 m	27	5.7	4.8	£393.8	£787.6
	6-8 m	37	7.9	7.2	£410.7	£821.5
	8-10 m	59	15.1	14.6	£504.4	£1,008.8
	10-12 m	90	36.8	25.1	£688.5	£1,377.0

***Net profit** The result of subtracting finance costs, depreciation and interest costs from operating profit.

** **Profit loss per day of missed fishing** Average daily net profit plus average daily fixed costs

Benefits

- 8.30. The introduction of VMS for under 12 metre vessels will enable the Welsh Ministers and other relevant parties to benefit from an increased evidence-based for decision making relating to fisheries management, enforcement, conservation, planning, surveillance and monitoring.
- 8.31. Increased evidence of levels of effort within individual fisheries or geographical locations will enable more informed decision making to support sustainability, traceability and to maximise economic opportunity. These benefits are outlined in more detail below.
- 8.32. The other options considered in this paper are likely to be more limited in the scope of vessel coverage and provide an incomplete picture. Having oversight of all licensed fishing vessels in Wales and the Welsh zone will provide the best foundation to control Welsh waters and inform policy and management decisions.

Government

- 8.33. VMS will allow for more effective monitoring and enforcement of Welsh fisheries and enable more risk based and targeted use of at sea patrols. Currently at sea patrols can find they do not complete many inspections at sea due to not finding appropriate vessels in a vast area. Utilising VMS, at sea patrols can better target locations and particular vessels, therefore for the same cost (charter, fuel, resource) and number of patrols, there should be an increase in the number of sightings and inspections.
- 8.34. Increased information on the whereabouts of vessels will enable more targeted shore based inspection activities. Currently coastal teams use intelligence to schedule visits for when they think relevant vessels will be in harbour. Using VMS data alongside other intelligence will enable inspections to be targeted and undertaken more efficiently.
- 8.35. VMS data may be used to initiate or support investigations for compliance enforcement. VMS data can be cross checked with other fisheries compliance data including landing and catch data enabling mismatches to be identified and investigated.
- 8.36. Implementation of VMS requirements may act as a deterrent to drive better compliance within industry, and provide better evidence of non-compliance.
- 8.37. Vessel location data has become increasingly important as a management tool since the UK left the European Union. Bringing VMS in through an SI enables it to apply to all relevant fishing vessels that operate in Wales and the Welsh zone. This will provide comprehensive oversight of both UK and foreign fishing activity in Wales and the Welsh zone.

- 8.38. Bringing forward vessel monitoring policy for under 12 metre vessels with help to ensure regulatory equivalence with EU regulations. This will assist to facilitate trade with the EU and meet traceability requirements, whilst also increasing food security and consumer confidence.
- 8.39. Over time VMS will enable a more comprehensive picture of Welsh fishing activity and support decision making and judgements on sustainability. Key evidence uses include:
- Marine planning - VMS data will support the implementation of marine plan policies and provide evidence for monitoring relevant policies.
 - Marine Protected Areas - VMS data will provide fishing activity information that can be used to inform MPA impact assessments and management.
- 8.40. The Welsh Government's Natural Resources Policy (the national natural resources policy produced under Section 9 of the Environment (Wales) Act 2016) sets out three National Priorities which, when implemented, will help to achieve Sustainable Management of Natural Resources (SMNR). Implementation of VMS for under 12 metre vessel will assist in delivering the nature based solutions priority by improving marine management. The data obtained from VMS will be used to make more informed decisions on fisheries management, marine protected area management and marine planning.
- 8.41. Section 6 in Part 1 of the Environment (Wales) Act 2016 introduced an enhanced Biodiversity and Resilience of Ecosystems Duty (the s6 duty) for public authorities. The s6 duty requires that the Welsh Ministers must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems. The introduction of VMS will enable monitoring of compliance with fishing restrictions that are in place to protect certain species or habitats, and provide data that will enable more informed decisions about marine management to be undertaken.
- 8.42. Introducing VMS aligns with the Digital Strategy for Wales by providing digital services and data.

Industry

- 8.43. The Welsh Government's primary objective in introducing this requirement is the long-term environmental and economic sustainability of Welsh fisheries. Managing stocks at sustainable levels will ensure the long term viability and profitability of the fishing industry.
- 8.44. VMS data will provide industry with evidence of their fishing activity track record which could assist with funding applications,

business plans, and responding to marine planning and marine licence consultations.

- 8.45. VMS could provide the ability to share positional data for Search and Rescue operations enhancing safety at sea for fishers.

Public

- 8.46. Publication of aggregated fishing data derived from VMS will provide the public with greater insight into Welsh commercial fishing activity.

Option 3 – Introduce VMS through a licence condition

- 8.47. Introduction of VMS through a licence condition would only apply to Welsh registered vessels. To obtain corresponding data from other UK and non-UK vessels, agreement would be required from their fishing administrations to include an equivalent condition on their licences. There is no guarantee of reciprocal arrangements and changes in the political landscape following EU Exit means such an agreement may not be forthcoming with non-UK fisheries authorities.

- 8.48. In terms of the UK, we understand that the Marine Management Organisation intends to bring in similar VMS requirements for under 12 metre vessels in 2022/2023. Scotland, Northern Ireland and Jersey are investigating options but currently have no published information on their proposals or timetable for implementation. If approaches or timescales are different to Wales, VMS implemented through a licence conditions could be a requirement for Welsh vessels that is not reciprocated by non-Welsh vessels operating in the same fisheries. This disparity would result in Welsh fishers incurring costs to fish in Wales and the Welsh zone that a non-Welsh fishers would not.

- 8.49. If reciprocal licence conditions were not agreed an incomplete picture of vessels activity would result, diluting the benefits to fisheries management and enforcement.

- 8.50. While there is currently very limited data available on the activities of under 12 metre vessels it is understood that relatively few non-Welsh registered vessels fish in Wales and the Welsh zone. This is because the small vessels that make up the under 12 metre fishing fleet tend to fish locally and not travel large distances. Non-Welsh vessels known to fish in Wales and the Welsh zone are mostly English registered where similar VMS requirement will be implemented shortly, or vessels that operate in the Welsh scallop fishery which are already subject to VMS requirements.

Costs

- 8.51. The costs of introducing VMS through a licence condition would be the same for government and industry as those for introduction of

VMS through a legislation. See costs outlined in Table 2 and option 2 for further details.

- 8.52. If licence conditions weren't reciprocated and non-Welsh vessels didn't operate VMS, Welsh vessels would be disadvantaged and have additional costs to pay which would have a minor negative impact on their profitability compared to non-welsh vessels.

Benefits

- 8.53. The benefits of introducing VMS through a licence condition cover the same topics as those for introduction of VMS through legislation. However, the benefits would have a slightly lesser effect if reciprocal licence conditions weren't agreed and implemented at the same time with all Fishing Authorities whose vessels operate in the Welsh zone.
- 8.54. While having vessel data on all of the Welsh under 12 metre fishing fleet would be a big step forward, not capturing data from other nations vessels would mean that assumptions on these data gaps would be made and confidence in the data would be lower. This could impact decision making for fisheries sustainability and marine management.
- 8.55. VMS data would be used to inform tasking of fisheries patrol vessels and shore based inspections but having no visibility of other nations vessels would continue to leave us unsighted on their activities in Wales and the Welsh zone.
- 8.56. VMS is expected to act as a deterrent and drive better compliance. If VMS is not mandatory for non-Welsh vessels this benefit would not be fully realised.

Option 4 –Voluntary VMS Scheme

- 8.57. Introduction of a voluntary VMS scheme would likely result in partial uptake of the use of VMS devices. Uptake may be enhanced by financial incentives available through the provision of equipment via the European Marine and Fisheries Fund (EMFF) but financial incentives provided by Welsh Government would only apply to Welsh vessels. It is unlikely that vessels from other UK administrations or from outside of the UK would adhere to the scheme.
- 8.58. The expected limited uptake of a voluntary VMS scheme would result in an incomplete picture of fishing operations in Wales and the Welsh zone and provide limited benefit for decision making relating to fisheries management, enforcement, conservation, planning, surveillance and monitoring.

Costs

- 8.59. It is unknown how many vessels would partake in a voluntary VMS scheme. The cost analysis in Table 4 is based on the assumption that 100 vessels (out of a total of 345) would install and operate a device.
- 8.60. The costs to government in Table 4 cover the following elements:
- 8.61. The direct cost of purchasing VMS devices for the current Welsh under 12 metre fishing fleet and 3 year warranty with each device. These are sunk costs which have been funded through the European Transitions Fund and the European Maritime and Fisheries Fund (EMFF).
- 8.62. Direct cost of paying the data charge for 100 vessels for 1 year after the legislation comes into force. This would be paid from the Marine and Fisheries divisional budget.
- 8.63. Costs to be paid to the VMS supplier for providing the service and helpdesk including database configuration, hosting, security, governance and integration with the UK VMS Hub. Initial set up work would be funded through EMFF and ongoing hosting costs would be funded through the Marine and Fisheries divisional budget for the duration of the contract with the current supplier.
- 8.64. Administrative costs for managing the system. This includes linking device ID's with fishing licence data, dealing with queries, responding to data requests and checking the transmitted data is received correctly. This would be undertaken using existing staff resource.
- 8.65. Staff time for managing the contract with the VMS device supplier utilising existing staff resource.
- 8.66. Staff time for setting up a new process or contract after the current contract expires. This would utilise existing staff resource.
- 8.67. Staff time for undertaking fisheries compliance. This is an ongoing tasks which would continue to be undertaken with the same level of resource. There should be an efficiency gain in outputs due to more targeted deployment of staff and vessels and more compliance able to be done from the office rather than reliance on having staff in the field.

- 8.68. Costs for producing data products such as fishing intensity maps to inform fisheries and marine environmental management (MPA's, Marine planning).

Industry

- 8.69. The costs to the Welsh under 12 metre fishing industry that are covered in Table 4 are:
- 8.70. Direct cost for payment of annual data charge. Welsh Government will pay the data charge for the first year after the legislation comes into force. After this it will be the responsibility of the owner or master to pay this annual ongoing cost (currently £120 ex vat).
- 8.71. Direct cost for repair or replacement of device. The devices supplied by Welsh Government have a three year warranty to minimise costs to the industry. However, the industry will pay for repair/replacement costs that are outside the scope of the warranty or after the warranty period ends. There is no data available on the track record of the device so a failure rate of 10% year on year has been assumed after the device warranty ends.
- 8.72. It has been assumed that there would be no loss of earnings from a voluntary VMS scheme as there would be no mandate to stop fishing if the VMS device was not transmitting properly.
- 8.73. In future it's considered that the VMS contract model could change to one of 'approved suppliers' where the fisher chooses the device package that works best for them. In this situation it's expected that the device package would include support and hosting and this would be paid directly by the fisher to the device supplier, removing Welsh Government's involvement with this element.

Table 4 Option 4 costs summary over 10 years

Cost Element	Sunk Costs	Y1(21-22)	Y2 (22-23)	Y3(23-24)	Y4 (24-25)	Y5 (25-26)	Total Yr 5 horizon	Y6(26-27)	Y7(27-28)	Y8(28-29)	Y9(29-30)	Y10(30-31)	Total Yr 10 horizon
Total Cost/Investment	£694,000	£45,000	£53,000	£53,000	£92,000	£23,000	£265,000	£8,000	£8,000	£8,000	£8,000	£8,000	£304,000
Cost to Industry	£0	£0	£12,000	£12,000	£66,000	£66,000	£155,000	£66,000	£66,000	£66,000	£66,000	£66,000	£483,000
Cost to Government	£694,000	£45,000	£65,000	£65,000	£158,000	£88,000	£420,000	£73,000	£73,000	£73,000	£73,000	£73,000	£787,000
Total Cost/Investment	£694,000	£45,000	£62,000	£60,000	£142,000	£76,000	£386,000	£61,000	£59,000	£57,000	£55,000	£53,000	£672,000

* Sunk costs are not included in the total year 5 and year 10 horizons

Benefits

- 8.74. The benefits of introducing a voluntary VMS scheme cover the same topics as those for introduction of VMS through legislation (option 2). However, it is expected that uptake of the scheme would lower than option 2 or 3 and be limited to a relatively small proportion of the fleet. This would significantly reduce the benefits realisation.
- 8.75. Partial uptake of VMS would provide an increased evidence base for policy decision making but attaining an incomplete picture of vessel activity would mean that assumptions on data gaps would be made and confidence in the data would be lower.
- 8.76. VMS data would be used to inform tasking of fisheries patrol vessels and shore based inspections but having only partial visibility of the fleet would make it difficult to plan compliance activities for vessels without VMS on board.
- 8.77. If mandatory for the entire fleet, VMS is expected to act as a deterrent and drive better compliance. If VMS is not mandatory this benefit would diminish.
- 8.78. It is considered unlikely that foreign vessels would comply with a voluntary scheme, this would leave us unsighted on their activities in Wales or the Welsh zone.

Summary of costs benefits analysis

- 8.79. The preferred option is to introduce legislation which will make it mandatory for all licensed fishing vessels under 12 metres in length operating in Wales or the Welsh zone and all under 12 metre Welsh fishing vessels wherever they are fishing to install and operate VMS whilst undertaking fishing activity.
- 8.80. A summary of the benefits analysis is provided in Annex 1. This demonstrates that legislation is the option that will most effectively meet the objective of improved fisheries monitoring and management and is, consequently, the preferred option.
- 8.81. Doing nothing (option 1) would not enable sustainable management of Welsh fisheries and, consequently, this is not the preferred option.
- 8.82. Whilst introduction of VMS through a licence condition could deliver vessel monitoring, and in turn sustainable fisheries management, the obstacles described under option 3 above are significant and there is no cost saving compared to introducing VMS through legislation (option 2), so consequently, option 3 is not the preferred option.

- 8.83. Introducing a voluntary VMS scheme (option 4) would provide limited benefit and would not enable sustainable fisheries and marine environmental management and, consequently, this is not the preferred option.

9. Integrated Impact Assessment

- 9.1. The Integrated Impact Assessment is available on the Welsh Government Website: <https://gov.wales/sea-fishing-operations-monitoring-deviceswales-order-2022-integrated-impact-assessment>

10. Competition Assessment

The competition filter test	
Question	Answer yes or no
Q1: In the market(s) affected by the new regulation, does any firm have more than 10% market share?	No
The competition filter test	
Question	Answer yes or no
Q2: In the market(s) affected by the new regulation, does any firm have more than 20% market share?	No
Q3: In the market(s) affected by the new regulation, do the largest three firms together have at least 50% market share?	No
Q4: Would the costs of the regulation affect some firms substantially more than others?	No
Q5: Is the regulation likely to affect the market structure, changing the number or size of businesses/organisation?	No
Q6: Would the regulation lead to higher set-up costs for new or potential suppliers that existing suppliers do not have to meet?	Yes
Q7: Would the regulation lead to higher ongoing costs for new or potential suppliers that existing suppliers do not have to meet?	No
Q8: Is the sector characterised by rapid technological change?	No
Q9: Would the regulation restrict the ability of suppliers to choose the price, quality, range or location of their products?	No

- 10.1. The Order is not expected to have an impact on competition in Wales or the competitiveness of Welsh businesses.

11. Post implementation review

- 11.1. A Post implementation review will be carried out to establish whether implementation of the subordinate legislation is having the intended effect and to monitor any negative impact on the industry.

Annex 1 Options benefits summary

Benefit	Option 1 Do nothing	Option 2 Legislate for VMS	Option 3 Licence condition for VMS	Option 4 Voluntary VMS
Increased evidence-based for fisheries management for sustainability	No	Yes	Mostly	Partially
Comprehensive picture of fishing activity in Wales and the Welsh zone for marine management (MPA, Marine planning)	No	Yes	Mostly	Partially
Effective monitoring and enforcement through risk based and targeted use of at sea	No	Yes	Mostly	Partially
Effective monitoring and enforcement through risk based and targeted shore based inspection	No	Yes	Mostly	Partially
Data to initiate or support investigations	No	Yes	Mostly	Partially
Deterrent to drive better compliance	No	Yes	Mostly	Partially
Visibility of foreign and non-Welsh vessels	No	Yes	No	No
Regulatory equivalence with EU regulations	No	Yes	Yes	Partially
Supports Welsh Government's Natural Resources Policy	No	Yes	Mostly	Partially
Supports the section 6 Biodiversity and Resilience of Ecosystems Duty	No	Yes	Mostly	Partially
Aligns with the Digital Strategy for Wales	No	Yes	Yes	Yes
Provide industry with evidence of their fishing activity track record	No	Yes	Mostly	Partially
Ability to share positional data for Search and Rescue operations	No	Yes	Mostly	Partially