1. **Certification Extension**

We will allow an extended period of until the 28th of October for suppliers to submit all the required certifications. This has been granted as some certifications may take a period of time to obtain.

In order to be eligible to receive the certificate extension, suppliers must provide evidence to the MMO at IVMS@marinemanagement.org.uk that they are in the process of obtaining their certifications by the 1st of October.

1. **There is increased importance on the compliance with GDPR, is there any reason why within the scoping document there is no information surrounding encryption of the data?**

Please refer to the following:

a. Specification of Requirements – Section 5.3b

* for security a 2-way SSL (TLS 1.2) shall be used when an internet connection (HTTPS) is established;
* data security, based on a two-way certification using \*PKI digital keys, URL, and IP addresses, is required for all communications over the internet between the supplier and UK VMS Hub.

\*PKI digital keys = Public Key Infrastructure which is specifically designed to provide encryption

b. I-VMS Interface v1.5.pdf - Sections 3 and 4

* Both sections contain detailed information on the connection requirements and PKI certificates

c. Requirements of Participation – Section 5.5

* Exchange and configuration of security certificates and access credentials for connections
1. **Knowing the variety of vessels this device will be installed on will IEC60945 be relevant to all vessels?** Yes
2. **A major clarification we require is understanding on whether it is only the battery that can leave the vessel at any time for recharging? Wholesale removal of a device is not accepted if the rechargeable battery pack is embedded in the device?** Correct. Wholesale removal of a device is not accepted.
3. **In regard to the antenna there are separate references to the antenna being IP67 rated for external exposure, however there are other references to it being enclosed within the unit? Which is correct? (Warranty, ease of swap, camera) ref 7.1.a?**

Please refer to 5.1 General communication requirements.

‘The I-VMS device must provide GSM/GPRS based communications through a transceiver embedded within the I-VMS device to transmit position reports. The antenna must also be contained within the I-VMS device.’

In Section 3.3c the word ‘antenna’ will be removed to read ‘Any part of the I-VMS device exposed to the elements must provide acceptable service in the marine environment and be waterproof to IP67 standard as a minimum.’

Section 7.1d will be reworded from ‘The antennas connected to the I-VMS device must not be obstructed, disconnected, or blocked in any way.’

To ‘The I-VMS device must not be obstructed or blocked in any way to prevent transmission of data.’

1. **Are the airtime costs applicable to be bundled into the grant funding figure? – I would remove this and ask what services is the grant aid intended for?** A level of funding reimbursement will be provided to the fishing industry affected. The reimbursement contribution will be for the initial device and the initial engineer’s installation costs/charges.

The Airtime on its own is not an eligible cost, similarly a warranty, but if these were part of the device cost then they could be accepted. For example, the quote is for 1 x unit which includes 12 months airtime and a 36-month warranty that would be acceptable. If the quote was itemised and airtime and warranty separate cost lines, they would not be eligible costs for EMFF.

1. **Is VAT included within the £500? – Does the £500 grant aid include VAT and if not does it apply?** As the reimbursement (circa £500) will be claimed by the fishing industry, the figure would depend on each applicant in whether they VAT registered or not.
2. **Would pre-approved MMO iVMS devices carry its type approval into this type approval and if not would they qualify for the grant?**

I-VMS devices approved by the MMO in 2016 will require a resubmission of documents to ensure the product is in line with the updated specification of requirements.

If the physical hardware of the device has been unaltered in the five years since the 2016 approval (and evidence has been submitted to that effect), then the physical tests; positional accuracy, power management tests etc., conducted by our procured testing company would remain valid and the specific tests documented in the ‘I-VMS Supplier Device Test Methodology 25.08.21’ document would not be required.

If a 2016 approved device is submitted with the appropriate certifications and the completed ‘response requirements form’ we will evaluate and if it passes, it will qualify for the grant as would all other approved devices.

The exception would be to the customers that currently already operate a 2016 approved device. These individuals would not be eligible a second reimbursement amount.

1. **Clarification 5.1.d this implies 1 minute continual reporting for devices which cannot support 3 month data retention, regardless of Geo-Fence? How does this reflect against law of not reporting whilst in a non MPA?**

As detailed in 5.1.d, the requirement is that ‘As a minimum the I-VMS device must be capable of taking position fixes every 1 minute. Further, the I-VMS device must either store each of these position fixes on an internal log for a minimum rolling period of 3 months or captured and stored by the device supplier, then transmitted from the supplier to the UK VMS Hub.‘

Yes this is regardless of geofences. I-VMS will become a legal requirement and therefore all vessels affected must report I-VMS throughout English waters. I-VMS is no longer solely specific to MPAs which was the consideration five years ago.

1. **When is the decision going to be made on the frequency of reporting, what is the date?** This is expected in October
2. **3.4 and 6.1.b Is there a requirement for 2 forms of compliance? We need an alert for whether the device has power and an alert for reporting being operational, can we communicate these methods via the same medium other than physical indicator on the equipment?** As stated in 3.4 ‘The device must display external electronic indicators to indicate to the vessel master that a vessel’s I-VMS primary power source is connected to the device. It is desirable to have the indicator to indicate when the battery source is drawn.’

Therefore, the device must have a physical indicator.

1. **Based on previous experiences regarding photographs of installations, it is not practical to capture the serial number of an installed device and identifying the whole vessel included within one picture. What are the reasons for a photograph being required?** We require evidence that the said device is on the said vessel and has been installed in a suitable location. Multiple photos can be taken to provide that level of assurance.
2. **‘’For example, we may require the national I-VMS reporting frequency to the UK VMS Hub is set at a rate of every 3 minutes when located inside the six nautical mile limit of the English coastline and 10 minutes at all other times in English waters.” Please can you confirm that you want to capture positions from the device when inside the six nautical mile limit as shown. If devices can be removed from a vessel then is there not a GDPR issue when transmitting their shore-side whereabouts?**

The legal requirement is for under 12 vessels to operate and transmit I-VMS data when within English waters. It is the supplier’s responsibility to handle their customers data in line with GDPR rules.

Suppliers can work with their individual customers and explore how they may wish to suspend transmitting shore-side data if the vessel owner intends to tow their vessel further inland. It is not for us to dictate how suppliers should do this but perhaps a simple case of setting certain shore-based geofences for certain customers that intend to tow their further inland. The legal requirement is that we must receive I-VMS data when within English waters.

1. **“We have received some queries regarding certifications and as a result we can now allow suppliers an extension of up to the 28th of October to present the certificates, so long as they provide evidence that they have already commenced the process in obtaining them. That evidence must be sent to us prior to the submission deadline of the 1st of October in order to be eligible for the extension.” Please can you clarify what you mean? We can demonstrate we have been liaising with a 3rd party for independent IEC60945 testing but we still don’t believe we have a firm requirement as to what is needed. For the authority to fairly compare responses against 3.2a we must be measured on a level playing field. 3rd party test centres do not have enough information to give us a quotation for some of the work.**

The extension has been offered to allow suppliers the ability to source the relevant certifications. A requirement is that of IEC60945 certification, along with other certifications. We requirement email evidence that you have commenced the process of seeking these certifications.

1. **In regards to approved companies indirectly receiving public funds, the responsibility to ensure public funds are well spent and ensuring companies are suitably funded for providing ongoing service levels and support maintaining the proposed 5 year lifecycles of the product, what financial checks, number of years trading and minimum financial status will be applied to receive approval in this program?**

The funding reimbursement contribution will be available to the individual fishers affected. This is specifically for an I-VMS approved device and the initial engineers cost during the first installation. The MMO I-VMS type approval programme is set up to ensure industry have a choice of I-VMS devices. Financial validation of I-VMS suppliers themselves is not a requirement within the type approval programme, nor part of funding eligibility. It is for the fishers to determine their preferred product and check a supplier’s background if they wish to.

It is the applicant that is responsible for any conditions and also for passing the eligibility criteria and assessment when making the application for funding. As such the suppliers are not subject to checks by the Grants team other than a basic check on companies’ house.

1. **Are the same shape files/coordinates available for potential suppliers today?**

A policy decision on reporting rates is expected in October, therefore we do wish to hold off on supplying geofences/shapefiles at this stage whilst discussions are ongoing, especially as those discussion may alter the final geofences, or even the need of them initially if a flat rate of reporting becomes the initial starting point for I-VMS data.

However, here are draft example versions. These only been supplied in order for companies to consider performance impacts.

Please note on page 12. That suppliers must not interfere, amend, alter, or reduce the coordinates contained within the geofence without strict permission from the MMO.

Therefore, if you do intend to breakdown a set of geofences that we supply post approval, you will need to contact us.



1. **I have downloaded the attached document and it appears to stop abrupt at clause 6.12**

**Can you please confirm if there is any more info that is missing?**

Please disregard 6.12. It is an error and the document should finish at 6.11

1. **The functional requirement does not state that the *device* must encrypt data before it is transmitted over the air. Please clarify your requirement.**

We have received a query on whether we expect all I-VMS devices should be transmitting encrypted data.

Whilst the I-VMS project thought it was made clear and the expectation is that all I-VMS data must be encrypted, we will make it abundantly clear in the specification of requirements under with and insert a new section, being 4.1h ‘All I-VMS transmitted data must be encrypted’ and it will be added into the response requirements.

We do not expect this to be a major concern from any interested supplier namely because this would naturally be seen as want for customers generally, wanting their personal transmitted data kept secured.

1. **It is mentioned that: “These core tests should be undertaken by an independent company which specialises in testing and certifying GPS and navigation-based products. The tests here cover aspects such as device accuracy, power management, tamper aspects (e.g., sending of tamper alert), and GPS/GSM blockage.” Can we do it by a foreign company (established in EU country)? What kind of company do you recommend?**

You can use any company, there are no restrictions. Please note that we state that ‘These core tests **should** be undertaken by an independent company which specialises in testing and certifying GPS and navigation-based products.’ Therefore, it is advisable for an independent company to carry out these, but it is not a must. Companies can if they wish conduct their own testing following the methodology set out if they have the required skill set and environment to do so.

1. **Can we batch data and send in packets?**

We will not accept data sent in batches or packets unless in the event that the device is forwarding on stored positions when GPRS/GSM coverage is restored. Data should be received in near real times at all other times.

1. **What is your expected split between the wired and auxiliary powered vessels?**

Information is retrievable from the spec.

‘The English under 12 metre fishing fleet is estimated to contain approximately 2,150 licenced vessels. Of which it is expected around 870 of these vessels will not have a wheelhouse and sufficient on-board electrics, predominately from vessels below 6 metres in length and some from the 6 to 8 metre bracket. It is expected that all other vessels will have sufficient on-board power sources and wheelhouses to permanently house an I-VMS solution.’

1. **Will there be a submission extension?**

There has been no material change to the specification of requirements as a result of the clarifications submitted, and therefore the deadline of the 1st of October for submissions remains, along with the 28th of October for certifications as previously communicated.

1. **Will clarifications be published?**

Responses that have resulted in minor adjustments to the wording within the specification or associated documents have been communicated to all interested parties. A clarification document will be published on the Friday 17th of September on the I-VMS webpage.

1. **Further Questions raised to the I-VMS project – If further questions are sent on the 22nd of September query deadline, will there be additional time afforded to digest and consider before the submission deadline?**

The submission deadline of the 1st of October remains

1. **What should we state if we do not intend to provide ‘in port’ functionality?**

Regarding ‘In Port’ Functionality. If you are not providing it, that is fine. Please state you are not providing that service and select No in the relevant rows. The MVP only relates to those that intend to offer this additional functionality. Devices will still be accepted for review.

1. **Will the MMO require a roaming SIM to be provided with the tracking solution? We are thinking that vessels may enter other country waters on a regular basis and a roaming SIM will reduce costs and increase reliability in these instances.**

Most fishers will want a SIM that will allow them to operate in and around the UK and potentially beyond UK limits without cause for concern. Therefore, it is advisable that a roaming SIM is considered. There will be pockets of much smaller vessels that will remain fairly inshore to their local area, to which you may determine a different option, however the fisher will need assurance the SIM fits their needs.

1. **Section 6.7 specifies that as part of the grant the Vendor must instal the equipment on the vessels. If it can be categorically proven that the installation was a very simple process would MMO consider self-install by the Fishers with proof by means of photo graphic evidence?**

We are advising against self-installs namely because we want to be assured that the device is located in the best possible location on the vessel, where suppliers can also be assured there will be minimal interference to the device, electrical or otherwise. Vendors can use engineers to perform this. In addition, it is an integral part of the grant reimbursement process in that the device is installed professionally, correctly and can prove the device is securely attached to the vessel and not easily removable. Fishers should not be removing the device from the vessel either. Only connectable power solutions may be removed for recharging purposes.

1. **Who is the £500 grant paid to? Is it the Fisher directly or to the Vendor?**

As the reimbursement (circa £500) will be claimed by the fishing industry, the figure would depend on each applicant in whether they VAT registered or not.

1. **Given over the air encryption is a requirement, please can you confirm what standard is needed?**

Suppliers will need to support the encryption methods exactly as specified in the IVMS interface v1.5 pdf document ‘Section 3’

The supplier hub to UK VMS Hub connection takes place over a protocol called TLS (V1.2)

The API spec highlights acceptable encryption certificates and ciphers, of which,

the first two are as follows;

TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256 - 128-bit

TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384 - 256-bit

1. **Can we get an extension on the completion of certification beyond the 28th of October?** Unfortunately, certificates must be provided to us by the 28th of October. All other documentation must be received by the 1st of October (midday).
2. **Both the functional specification and the response document say that “The I-VMS device must provide up to 1,000 national or local I-VMS reporting transmissions to the UK VMS Hub, whilst in port and at sea, when relying upon battery power alone”. This contradicts the test document which says more than 1,000 must be transmitted.**

Yes, as a minimum a 1,000 reports must be transmitted when relying on internal battery power alone. So essentially this means that for devices which are expected to be operational through using the vessels onboard mains power, the device must also deliver 1,000 reports via the internal battery when that onboard mains power has been taken away from the device.

1. **The requirement for 1,000 messages seems to be applicable whether powered by onboard mains (which suggest an internal battery is also mandatory?), or whether powered by other means.**

Yes, to reiterate an internal battery is required in all devices, including those that are connected to onboard mains.

1. **When a device is powered by other means and has a rechargeable and removeable battery, a battery which can last appreciably more than 50 hours, and which powers a system which gives low battery alerts etc, to what does the 1,000 messages relate?**

1,000 messages relate to a frequency of 3-minute reporting. That would equate to a total of 50 hours. A formal decision on reporting rates will be delivered in October.

1. **In the response requirements please can you confirm the following:**

**ALT016 - If the power solution is disconnected in any way from the device, the rechargeable battery, together with a recharging facility, must activate when primary power is lost or not available. See section 3.5 internal battery.**

* + **power solution = removable power pack / rechargeable battery**
	+ **rechargeable battery = internal backup battery**
	+ **recharging facility? – If the above are correct, I don’t understand how this works - if there is no power how is it recharging and what is it recharging?**

All devices require an internal built-in battery on top of primary power source as a form of a back-up. That internal battery should be rechargeable through its connection to the primary power source, either plugged into mains powers or via alternative power source (connectable or built-in). The internal battery activates when access to the primary power has been lost. This is to ensure there is some level of reporting when things go awry unexpectedly.