Vessel Monitoring System (VMS+) Guidance

November 2013

This guidance is designed to help you fully understand the regulatory requirements of vessel monitoring systems (VMS) and transmission of electronic logbooks (e-logs) and the functionality of the VMS+ device currently being fitted to the 12 to 15 metre fleet.

In the context of this guidance, VMS+ refers to the new UK approved VMS terminal provided by AST.

Regulatory requirements

1. VMS – EU reporting
It is an EU requirement that all fishing vessels of overall length (OAL) 12 metres or more must transmit their position every 2 hours when at sea. Position reports must be sent via satellite. VMS+ is the only accredited system to enable vessels to comply. The VMS+ also transmits a number of different types of VMS reports related to the activity of the vessels (for example, entering or leaving a geozone or port), tamper proofing, power disruption and diagnostics of the device.

2. VMS – national reporting
Access to certain areas may be subject to VMS monitoring, such as marine protected areas. Current examples are Lyme Bay on the south coast and Welsh waters. Position reports can be sent via GSM (mobile phone) networks. VMS+ has been approved for national reporting and is compliant for the Welsh waters marine protected area.

3. E-log reporting
Vessels 12 metres or more OAL must send their e-log messages electronically under the current regulations. The EU does not stipulate how these are sent so satellite or GSM can be used. However, masters and owners are responsible for ensuring that messages are sent at the correct time and this may mean that sending via satellite is the only option (such as if at sea in areas with no mobile coverage). VMS+ has the functionality to send e-log messages using either satellite or GSM. Owners are not obliged to use VMS+ for the sending of e-logs if other communications, such as a GSM dongle allows a master to be compliant with e-log reporting rules.
VMS+ functionality

AST, in open tender, are now approved as the sole supplier of VMS+. They arrange the installation and commissioning of the VMS+ units. Grant aid is available but this is paid direct to AST on the fisherman’s behalf to reduce the burden on industry.

1. VMS
   - When at sea the unit will typically transmit every 2 hours via satellite to meet EU requirements.
   - Additionally, the unit will transmit via GSM when vessels are fishing inside designated areas. The frequency of transmissions will depend on the reporting regime in place in that area.
   - An 'InPort' button allows an owner to declare the vessel as being in port. This reports the event then stops further transmissions. Details of how to use this button are given in the annex. The unit will reactivate if the vessel is moved.

2. E-logs
   Once a vessel’s e-log is compatible with VMS+ (you will be told by your e-logbook provider) then the e-log can be sent via VMS+ if:
   (a) the owner has agreed to an airtime contract to use the VMS+ for e-logs
   (b) the e-log and VMS+ are connected via the USB cable (grant aided and supplied as part of VMS+ install)

Billing

Vessel owners will be billed for all the VMS+ transmissions and for e-logs if the VMS+ is being used to send e-log messages. There will be 2 elements to the billing as clearly the VMS+ has two communication channels – satellite and GPRS.

1. Satellite charges
   EU VMS reports will be billed as PAYG (pay as you go) a message and itemised at the end of a month. This is at the rate of $0.11 (about 8 pence) a report. E-log reports via satellite are billed at $0.11 for 30 bytes of data (depending on your e-logs provider and the size and content of the message we estimate each e-log message may cost from 50 pence) these too will be billed PAYG.

2. GPRS charges
   E-log reports can be invoiced as PAYG or AST are offering a GPRS “all you can eat” bundle of $15.00 USD (£12.53) a month fixed charge which would include all e-log reports sent over GPRS including any national VMS reports.

For PAYG will be invoiced at $0.03 a message (about 2 pence a report) or 30 bytes of data for e-logs.
Annex: 'InPort' button

At anchor or in port

- The rocker switch is pushed down at the top.
- The blue LED light is lit.

The picture above shows the position of the 'InPort' switch when the vessel is in port:

It is important to get in the routine of switching the 'InPort' button off before sailing and switching it on when you return to port.

Important – the correct use of the 'InPort' button means that the vessel will not transmit the 2-hourly report while in port and this will reduce your costs.

Even if the 'InPort' button is on, the unit will re-activate if the vessel moves and resumes transmitting.

Switching the mains power off and using the main power breaker does not stop the unit working due to its internal battery supply and a report will be sent that mains power has been 'lost'. Power is switched to internal battery and all other reports will continue.