



Maritime Safety Information (MSI) to mariners via Navtex.

Background

The UK transmits Maritime Safety Information (MSI) to mariners via Navtex, a system which provides navigation warnings and meteorological forecasts via radio signal to ships. There is a chain of Navtex transmitters in Northern Europe and these transmitters all use the same frequency. To avoid interference between stations, Navtex messages are broadcast within a series of ten minute, windows. This system provides each transmitter with multiple, ten minute slots, within each 24-hour period, during which no other station will be transmitting. The nature of the messages transmitted via Navtex makes it safety critical for the maritime industry and necessary for the UK to fulfil its obligations under [SOLAS](#). With regards to the offshore oil and gas industry Navtex messages will be broadcast, for example, when there are significant failures of aids to navigation, such as a power loss which results in an installation being 'dark in the water' i.e. loss of navigation lights and fog signals.

The problem

A key element of this system is the need for transmitters to remain within their allocated ten-minute transmission slots. In the UK, if a transmission exceeds ten minutes there is an automatic cut off which ceases the transmission. When this occurs, any messages in the latter part of the message, after the ten-minute mark, will not be broadcast. A recent study undertaken by the MCA indicated that a high number of Navtex transmissions are exceeding the ten-minute limit. Consequently, an unacceptably high number of messages are not being broadcast. The cause of this problem is the increased levels of maritime activity within the UK's Navtex service areas, which generates an increased need for Nav Warnings. This is a trend which is set to increase, with the expansion of offshore renewables and space vehicle launches from the UK.

Solutions

The MCA in conjunction with the United Kingdom Hydrographic Office (UKHO) have conducted a study of this issue and the origin/types of Navtex messages which are transmitted in a standard year. This process has identified that the capacity of the Navtex system is being exceeded by the volume of messages that need to be transmitted. As a result, there is a clear need to reduce the number of messages being transmitted, and it has been identified that the offshore sector contributes to 17% of Navtex messages, particularly in relation to Navaid failures. Another element is how long these messages are required to be repeated, which is linked to how long it takes to fix the failure of the navaid/issue.

The MCA has engaged with the Northern Light House Board, Trinity House and OPRED to identify how the number and duration of Navtex messages contributed by the offshore oil and gas industry can be reduced, in light of the current strain being placed on the Navtex system. It should also be noted that the MCA is also working with other industry sectors to achieve the same results.



Offshore Petroleum Regulator for Environment & Decommissioning

Conclusion

We request that the offshore oil and gas industry;

- Remains mindful that the Navtex system is not unlimited in its capacity;
- Works to minimise aid to navigation failures, which may result in the requirement for Navtex messages to be broadcast, and that where they do occur that action is taken to quickly resolve the failure.