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Agenda item [[2]](#footnote-3) 7.2

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Real-time Vessel Monitoring in Coastal Waters and the EEZ

# Summary

Coastal waters and the waters of the Exclusive Economic Zone (EEZ) are historically seen as open waters for ship traffic. In more congested waters measures are taken to enhance safety of life at sea, efficiency of navigation and the protection of the marine environment. Measures recognized by the International Maritime Organization (IMO), such as ship routeing, ship reporting system or Vessel Traffic Service (VTS), can mitigate risks at sea.

Coastal waters and the waters of the EEZ are increasingly used for other purposes than shipping. Examples are rapidly developing Offshore Renewable Energy Installations (OREI) and sea farming. These developments reduce the area of open sea and have an influence on the safe navigation of vessels. Governments can use the Formal Safety Assessment (FSA) methodology adopted by the IMO as a structured and systematic process for safety assessments and control of maritime risks. Recognized elements include risk analysis and cost-benefit assessment. VTS is a mitigating measure, but when a full VTS is not required or possible the establishment of an effective real-time vessel monitoring system can enhance safety of ship traffic.

At this moment there is no global standardized framework for vessel monitoring outside of a VTS. The absence of a standardized framework means there is currently no common understanding for international shipping of what can be expected in an area where a vessel monitoring system is established, nor to assist contracting Governments in establishing the system. There are currently no international regulations or guidance on a monitoring function, other than the *Vessel Traffic Monitoring Directive* (VTMD) which only applies to European Union (EU) member states.

## Purpose of the document

The purpose of this input paper is to request consideration of the topic of real-time monitoring of vessels when outside of a VTS, and the ability for such a harmonized system to enhance safety of navigation in certain areas.

G1142 “The Provision of Local Port Service other than a VTS”, also describes the problem well within its Introduction. Currently, the distinction between VTS and vessel monitoring outside a VTS is not laid down clearly within any document, neither is any agreed restrictions around what should and should not be provided, principals for the system, or qualifications and training. These are currently all clearly stated within G1142 for the difference between LPS and VTS, vessel monitoring could also benefit greatly from similar information, particularly in areas where IMO adopted routeing and reporting systems are in place, or offshore installations.

# Background

In coastal waters and the EEZ there are many areas which perhaps do not meet the criteria for a full VTS, as it has been identified from their Formal Safety Assessment that a VTS is excessive or inappropriate but would benefit from additional monitoring.

These areas may have been identified by the contracting Government as higher risk to transiting vessels, and therefore may also have IMO adopted routeing measures or reporting systems in place. Safety of Lives at Sea (SOLAS) Chapter V Regulation 10 states “a Government or Governments concerned may monitor traffic in those systems.” However, there is no standardized practice in which way to carry out this monitoring nor the communication systems and alerting required, no guidance on the training required to carry out this function, nor the correct identifier to use when communicating in this pretence, and no agreed definition of the term ‘monitor’.

Additionally, other areas such as the rapidly growing Offshore Renewable Energy Installations industry, particularly windfarms, affects the sea room available to mariners in coastal waters and the EEZ significantly, where they may also be restricted by specified routes, or be required navigate around them and avoid them. Responsible Governments should execute safety assessments to mitigate evolving risks due to the OREI’s, which may some times include the use of system alerting to assist in monitoring vessels navigating close to them.

# Discussion

For an international common understanding in the maritime domain this paper seeks to start a discussion about a global standardisation for vessel monitoring in coastal waters and the EEZ (when outside of a VTS). The potential legitimacy of referring this task to IALA is due to the very close relationship vessel monitoring has with VTS in general and the expertise in standards and practices contained within the IALA VTS Committee. Many of these areas also being within the vicinity of a VTS.

The discussion could include the following points;

1. What do we understand of term ‘monitoring’.
2. How do we differentiate between VTS and an area subjected to enhanced monitoring, how could this be harmonized internationally, identifying the key principles of the system.
3. Features of coastal waters and the EEZ, use of equipment and technologies, training, general navigation environment, coastal waters considerations, and relevance to VTS.
4. Use of Decision Support Tools (DST) to enhance the effectiveness of vessel monitoring.

# Action requested of the Committee

The Committee is requested to:

1. Consider this input paper.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-2)
2. Leave open if uncertain [↑](#footnote-ref-3)