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Technical Domain / Task Number 2 …………………………………

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Amendment to IMO Resolution A.1046(27)  
 for the inclusion of backup system (R-Mode)

# Summary

This document is to introduce a draft amendment of IMO Resolution A.1046(27) for the inclusion of a backup system into the Worldwide radionavigation system of IMO and to invite the Committee for their consideration.

## Purpose of the document

The purpose of this document is to invite the Committee to consider the inclusion of backup system, i.e. R-Mode into the Worldwide radionavigation system of IMO before the official submission to the 13th session of Navigation, Communication and Search and Rescue Sub-Committee (NCSR).

## Related documents

IMO Resolution A.1046(27), MSC 109/19/2, MSC 110/WP.1

# Background

At its 109th session of IMO Maritime Safety Committee, Austria et.al submitted a new work programme to develop performance standards for Ranging mode (R-mode) in radionavigation receivers. At its 110th session, MSC agreed to include the proposal into the biennial agenda of MSC and assigned NCSR as associated organ. In addition, during the consideration, Japan also proposed that that the scope of the output should also include consideration of any necessary amendments to resolution A.1046(27) concerning the use of R-mode as part of the worldwide radionavigation system and MSC also agreed to include the proposal in the scope of the work. (paragraph 18.35, MSC 110/WP.1)

# Discussion

According to MSC 109/19/2, R-mode is contingency PNT system that mitigates the impact of the GNSS service disruption on the ship’s ability to navigate safely. However, IMO resolution A.1046(27) *Worldwide Radionavigation System* (WWRNS) and other IMO instruments do not mention the contingency system. When MSC agreed to include development of performance standards for dual frequency multi-constellation satellite-based augmentation systems and advanced receiver autonomous integrity monitoring in shipborne radionavigation receivers in its post biennial agenda, since augmentation system was not included in A.1046 (27), MSC also instructed to NCSR to consider amendment to A.1046(27) to include augmentation system in WWRNS. Since augmentation system and R-mode are radionavigation system, the same approach should be considered before the development of performance standards for R-mode.

# Draft Amendments to A.1046(27)

The draft amendments to A.1046(27) that is incorporated the amendments made by NCSR12, is attached as Annex 1 of this document.

# Action requested

The ENG Committee is requested to consider this document and act as appropriate.

1. Leave open if uncertain [↑](#footnote-ref-1)