LIAISON NOTE TO CIRM

Enhanced Radar Positioning System

# INTRODUCTION

IALA thanks CIRM for their liaison note IALA ENG 13 Input Paper ENG13-3.1.0.19 Enhanced Radar Positioning Systems (ERPS). IALA welcomes CIRM involvement in ERPS standardisation.

# DISCUSSION

CIRM raised four discussion points, which are addressed below:

## Scope of equipment

CIRM raised the following comment:

*The attached paper “Enhanced Radar Positioning Systems for Resilient Positioning” talks about modulating the racon transmissions; does this mean that ERPS assumes a “solid state” radar?*

ERPS makes no demands on the radar transmitter. Radar receiver requirements will be identified during standardisation.

## Bearing accuracy of radar scanners

CIRM raised the following comment:

*IEC 62388 requires the radar bearing accuracy to be within 1 degree. For an eRacon located 3 nautical miles from the vessel, this would give a position accuracy of ±48 metres (3\*1852\* sin (0.5o) = 48). As bearing accuracy depends on the scanner length, longer scanners would be required to increase the accuracy of the position.*

Noted. Bearing accuracy is one of several error terms that need better study and definition.

## Detection of position signals within radar echoes

CIRM raised the following comment:

*When in a harbour, many targets may be displayed on the radar screen, this may be a challenging environment for radar to detect position signals from radar echoes.*

Noted.

## Coverage area of a modified eRacon

CIRM raised the following comment:

*The coverage area of the eRacon is likely to be limited due to the relatively weak power of solid-state radars.*

Noted.

# ACTION REQUESTED

The CIRM is requested to consider the above responses from IALA to the CIRM discussion points.