

SUB COMMITTEE ON NAVIGATION,
COMMUNICATIONS AND SEARCH AND
RESCUE
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**Information on the detection by night vision devices of Marine Aids to Navigation
fitted with light emitting diode light sources**

Submitted by IALA

SUMMARY

Executive summary: This document provides information on the use of light emitting diode light sources in Marine Aids to Navigation and their detectability by night vision devices.

Strategic Direction, if applicable: 2

Output: Not applicable

Action to be taken: Paragraph 6

Related documents: NCSR 5/17, NCSR 5/23

Background

1. The Sub-Committee on Navigation, Communications and Search and Rescue, at its 5th session, considered paper NCSR 5/17 (Report of the twenty-fourth meeting of the ICAO/IMO Joint Working Group on Harmonization of Aeronautical and Maritime Search and Rescue). This paper, at section 9.1 of the Annex, discussed issues related to light emitting diodes (LED) potentially not being detectable by night vision devices.

2. The paper further identified that search and rescue resources relied heavily on the visual and infra-red spectrum when conducting night and low-light operations.

Discussion

3. The IALA Engineering and Sustainability Committee has reviewed NCSR 5/17 and NCSR 5/23 and notes that LED light sources are rapidly becoming the most common form of Marine Aid to Navigation light source.

4. LED light sources used in Marine Aids to Navigation do not contain any infra-red light and will, therefore, not be detected by night vision devices.

5. It is possible to design Marine Aids to Navigation LED light sources to include infra-red light however, as their primary purpose is for human visual detection, this is not considered a practical way forward.

Action Requested

6. The Sub-Committee is requested to note the information provided.