



19th IALA Conference 2018

Incheon, Republic of Korea

ABSTRACT SUBMISSION — SOUMISSION DE RESUME

Topic No. : / Sujet n° : 7 or / ou
proposed topic / sujet proposé: Visual aids (Advances in light technology)

AUTHOR / AUTEUR:

Title / Titre (Mr, Ms, Capt, etc.) : Mr

Family name / Nom de famille : LEE

Surname / Prénom : DONGHEE

IALA member organisation / Organisation membre de l'AIMS :

Daekee Marine Corporation

Postal address / Adresse postale :

#132(Cheil Bldg. 3Fl.), Gyeongin-Ro,

Nam-Gu, Incheon

Republic of Korea

Telephone (including country and area codes) / Téléphone (y compris codes national et régional)

Office / Bureau : +82-62-605-9318 Mobile : +82-10-5338-1452

e-mail(s): dhlee91@gmail.com

TITLE: Development of Small LED Beacon by Applying Switchable Multi - Light Distribution to Enhance the Recognition of Light Considering the Roll Motion of Buoy

ABSTRACT / RESUME:

Aids to Navigation(AtoN) are critically important for ships to navigate with safe. Thus, various physical ways are applied to enhance the recognition including visible aides, acoustic aids and etc. To provide the visible navigation information to ships, a variety of LED beacons are utilized as the AtoN because the LED light source consumes the reduced electrical power. Navigating light buoy transfer the light signal which is generated from small LED Beacon on top of the navigating light buoy. Since the navigating light buoy are rolled by waves, the narrow light signal from small LED beacon could be lost from the point of view of navigator in ship when the ship is close to navigating light buoy resulting in the crash between the ship and buoy on occasion. The objective of this study is to enhance the recognition of characterization of light by applying multi-light distribution LED lighting lantern as well as switchable light distribution according to the rolling motion of the buoy. By means of thoes advanced lighting technology for LED beacon , it is expect to prevent marine accident and to secure ocean safety by minimizing the occurrence of dark region to navigator under complicated oceanic environment.

10, rue des Gaudines - 78100 Saint Germain en Laye, France
Tél. +33 (0)1 34 51 70 01- Fax +33 (0)1 34 51 82 05 - contact@iala-aism.org
www.iala-aism.org

International Association of Marine Aids to Navigation and Lighthouse Authorities
Association Internationale de Signalisation Maritime