IALA COUNCIL
60th Session

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Kuala Lumpur
Malaysia

Agenda item 12 – INTERNATIONAL

12.1 IMO

12.1.4 IMO NCSR2 Meeting

Note by the Secretariat

1 NCSR2

The Sub-Committee on Navigation, Communications and Search and Rescue (NCSR) held its second session from 9 to 13 March 2015 under the chairmanship of Mr. C. Salgado (Chile). The following agenda items were of particular note:

- Recognition of Galileo as a component of the World Wide Radio Navigation Service
- E-navigation strategy implementation plan
- Performance standards for multi-system shipborne navigation systems

2 RECOGNITION OF GALILEO AS A COMPONENT OF THE WORLD WIDE RADIO NAVIGATION SERVICE

The Galileo Open Service will offer accuracy better than 4m (95%) and an availability of greater than 99.5%.

Galileo Initial Operational Capability (IOC) should be reached by the end of this year, at which point early versions of all services should be provided, albeit from a reduced constellation.

It was noted that the Galileo Interface Control Document is currently being reviewed and updated which may result in some changes to receiver firmware.

3 E-NAVIGATION STRATEGY IMPLEMENTATION PLAN

The Sub-Committee noted the outcome of MSC 94 related to e-navigation.

4 GUIDELINE ON SOFTWARE QUALITY ASSURANCE AND HUMAN CENTRED DESIGN FOR E-NAVIGATION

An input paper reporting the findings of the Correspondence Group (CG) on the harmonization of guidelines related to e-Navigation was submitted by Australia.

The CG was formed to review three guidelines developed in response to earlier e-Navigation user need analyses with the aim of consolidating them into a single guideline. The three guidelines were:

- Guidelines on Human Centred Design (HCD) for e-Navigation systems
- Guidelines on Usability Testing, Evaluation and Assessment (UTEA) for e-Navigation systems
- Guidelines on Software Quality Assurance (SQA) in e-Navigation.

These guidelines were incorporated in a draft MSC circular on Guidelines on Software Quality Assurance and Human Centred Design for e-navigation, for consideration by the Sub-Committee and subsequent approval by the Committee.

5 PERFORMANCE STANDARDS FOR MULTI-SYSTEM SHIPBORNE NAVIGATION SYSTEMS

The Sub-Committee had for its consideration the following two documents:

- NCSR 2/7 (Australia, USA, IALA and others) providing the updated draft performance standards for shipborne receiver equipment capable of using a combination of radionavigation systems, taking into account views expressed at NCSR 1
- NCSR 2/7/2 (Germany) commenting on document NCSR 2/7 and expressing the view on the need for the careful evaluation of the advanced draft performance standards.

The first of these was prepared largely in the ENAV Committee, and was introduced at NCSR2 by the USA. These are the first receiver performance standards to propose a generic approach, setting the minimum requirements that must be achieved, without detailing the systems used, or the methods applied. This move is to enable system manufacturers to offer different approaches depending on the user application and should also mean the performance standard is able to exist for an extended period of time without the need for an update.

Following intense discussions on the inclusion of terrestrial signals in the draft performance standard, the final version includes the requirement for “Receiver equipment, capable of combining measurements from multiple GNSS and at least one terrestrial radionavigation system, with or without augmentation, to form a single resilient PVT solution”. As such, these performance standards pave the way for eLoran and SBAS use in the maritime sector, without the need for bespoke performance standards. The amended version of receiver performance standards was recommended for approval by the MSC when it meets later in the year.

A second task under this agenda item was the development of guidelines for a shipborne position, navigation and timing data processing unit. The current draft of these guidelines is quite immature and further work is required before their impact can be considered. Therefore the MSC was invited to extent this work item for two sessions to enable these guidelines to be developed by the end of 2017. If this is not approved, the guidelines would need to be requested as a new work item, which may delay their development.

The IALA Secretariat would like to note its appreciation to Dr Nick Ward and to Dr Alan Grant of the UK R&RNAV for representing IALA in the Working Group sessions.

6 ACTION

The Council is invited to Note.