

Distr.: Restricted
15 February 2016
English
Original: English and Russian only

Working Party on Inland Water Transport

Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation

Forty-eighth session

Geneva, 17–19 February 2016

Item 9 (e) of the provisional agenda

Promotion of River Information Services (RIS) as well as other Information and Communication Technologies (ICT) in inland navigation: AIS Aid to Navigation (AtoN) in inland waterways

Proposals on the application of AIS Aid to Navigation in inland waterways

Transmitted by the Russian Federation

The joint group of the VTT EG and IECDIS EG at the forty-seventh session of SC.3/WP.3 proposed for discussion the document ECE/TRANS/SC.3/WP.3/2015/6 “Automatic Identification System Aids to Navigation report messages in inland waterways”.

In general, the Russian Federation agrees with the conclusions of the experts regarding the limitations and risks due to the application of AIS AtoN in inland waterways. However, such limitations and risks should not lead to disappointment and bring to non-use of AIS AtoN technology in inland waterways. Virtual AIS AtoN will never replace physical floating and fixed navigation signs, but, however, they can contribute to navigation safety for vessels equipped with Inland ECDIS, the number of which is being permanently increased. One of the applications of virtual AIS AtoN technology, namely *marking or delineating tracks, routes, areas to be avoided and Traffic Separation Schemes* is a fundamentally new aid to navigation.

In our opinion, the most significant problem is described in Section X of the above-mentioned document. Indeed, systems of fairway marking used by IALA and those used in CEVNI differ from each other. Main regulations for AIS AtoN technology, in particular:

- Recommendation ITU-R M.1371 “Technical characteristics for an automatic identification system using time division multiple access in the VHF maritime mobile frequency band”,
- Standard IEC 62288 “Maritime navigation and radiocommunication equipment and systems- Presentation of navigation-related information on shipborne navigational displays”,

- IALA Recommendation A-126 on “The Use of the Automatic Identification System (AIS) in Marine Aids to Navigation Services”,
- Recommendation ITU-R M.585-7 “Assignment and use of identities in the maritime mobile service”

are oriented exclusively on the maritime application of AIS AtoN. This implies the conclusion of experts of VTT EG and IECDIS EG in para. 71 of ECE/TRANS/SC.3/WP.3/2015/6 about the need for amending the Inland ECDIS standard in order to enable a correct display of the AtoN.

As a possible development in this direction, the Russian Federation proposes to amend the order of assignment of maritime mobile service identities (MMSI) for AIS AtoN. The current procedure is regulated by Recommendation ITU-R M.585-7 “Assignment and use of identities in the maritime mobile service”. According to this document, the following MMSI format for AIS AtoN is provided:

- (a) 99MID1XXX for physical AIS AtoN;
- (b) 99MID6XXX for virtual AIS AtoN,

where 99 – object class identity (AIS AtoN),

MID – maritime identity digits of the Administration (country);

1 – attribute of a physical AIS AtoN;

6 – attribute of a virtual AIS AtoN;

XXX – a random number.

Therefore, each Administration may assign maximum 999 physical AIS AtoN numbers and maximum 999 virtual AIS AtoN numbers. Here, both physical and virtual AIS AtoN are considered as maritime aids to navigation by default according to IALA standards.

It is proposed to determine the following MMSI format for AIS AtoN in inland waterways on which CEVNI is applied:

- (a) 99MID2XXX for physical AIS AtoN in inland waterways;
- (b) 99MID7XXX for virtual AIS AtoN in inland waterways.

It will double the quantity of AIS AtoN equipment that could be used by the Administration managing areas of both maritime and inland navigation, i. e. 2 X 999 according to IALA standards and 2 X 999 according to CEVNI provisions.

Recommendation ITU-R M.585-7 allows to assign the digits that follow 99MID in the MMSI format at the discretion of the Administration (see Section 4 “Assignment of identification to automatic identification systems aids to navigation” of Recommendation ITU-R M.585-7).

Furthermore, the proposed procedure of assigning MMSI to AtoN in inland waterways will allow to select these objects as inland waterway objects for the Inland ECDIS identification.