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DEGREE OF RISK EVALUATION

1 The Maritime Safety Committee, at its eighty-eighth session (24 November to 3 December 2010), at the request of IALA and with a view to improving the safety of navigation, approved the circulation of the details relating to the IALA Risk Management Tool for Ports and Restricted Waterways, which provides guidance to Member Governments to assess the risk of collisions and groundings along their coasts and when planning to implement new measures to minimize the risks of coastal maritime traffic.

2 Member Governments are invited to bring the information in the annexed Guidance to the attention of all concerned.

ANNEX

1 Chapter 5 of the SOLAS Convention, 1974, as amended, regulation 13, requests the Contracting Governments to provide such aids to navigation, as the volume of traffic justifies and the degree of risk requires. Similarly, regulation 12 of SOLAS chapter 5 also demands Contracting Governments to arrange for the establishment of Vessel Traffic Services (VTS) where, in their opinion, the volume of traffic or the degree of risk justifies such services. In both cases, IMO refers to IALA Recommendations and Guidelines.

2 Until recently, it was difficult for coastal States to get a clear view and a good knowledge of the maritime traffic along their coasts. The implementation of AIS on SOLAS ships has drastically changed the situation and, today, it is easy and cheap for every coastal State to have access to AIS data and to build an actual image of the coastal traffic, at least for SOLAS ships.

3 In the meantime, taking into account advances of digital technology, IALA has developed different tools to assist IALA Members to assess the risk along their coasts and to answer the SOLAS chapter 5 requirements. The tools, which can also be used to justify and validate any proposed requests of routing measures (chapter 5, regulation 10), or mandatory ships reporting system (chapter 5, regulation 11), are based on the following techniques:

- The Geographic Information System (GIS), providing authorities with vessel tracks selected using specific criteria (type, draught, etc.) giving graphical presentation of actual vessel activity for a given waterway and in relation to an aid to navigation, including VTS;
- The computer simulation technique for planning of aids to navigation and VTS in a specific waterway, channel or port area offers a method to help ensure that aids to navigation are appropriate and cost effective; and
- The IALA Risk Management Tool for Ports and Restricted Waterways, with its two components, the PAWSA tool (a qualitative model) and the IWRAP Mk2¹ tool (a quantitative model), which allows an authority to measure and quantify the risks of collisions and groundings in any waterways.

4 These tools are described in the following IALA Recommendations and Guidelines:

- O-138: IALA Recommendation on the Use of GIS and Simulation by Aids to Navigation Authorities (December 2007)
- O-134: IALA Recommendation on the Risk Management Tool for Ports and Restricted Waterways (May 2009 – Ed.2)
- 1057: IALA Guideline on the use of GIS by Aids to Navigation Authorities (December 2007)
- 1058: IALA Guideline on the use of Simulation as a Tool for Waterway Design and Aids to Navigation Planning (December 2007).

¹ The IWRAP Mk2 tool has now replaced the IWRAP tool. It has been recently validated by the IALA Council.

5 All the documents are available free of charge on the IALA website – www.iala-aism.org. Two manuals – the NAVGUIDE and the VTS Manual – are also available from the IALA Secretariat e-mail: iala-aism@wanadoo.fr.

6 The Authorities responsible for the safety of navigation are encouraged to use the tools described in the present circular to assess the risks of collisions and groundings along their coasts and when they plan to implement new measures to minimize the risk of coastal maritime traffic.
