

## *e-Navigation for Inland Waterways 2017*

A new PIANC Working Group 156 (WG 156) publication titled: *e-Navigation for Inland Waterways 2017* deals with updating the PIANC River Information Services (RIS) Guidelines' of 2004.

When PIANC Working Group 125 finished its report in 2011, it concluded that River Information Services might benefit from concepts in the maritime world such as e-Navigation, e-Maritime, and Vessel Traffic Management (VTM). In addition it was found that in several regions, for example the Westerscheldt River, the interaction between seagoing and inland transport was increasing

The most important interactions are:

- The number of mixed traffic areas, as well as the traffic density itself was constantly increasing. The situation with inland barges and seagoing vessels operating next to each other call for a harmonisation of the services and information used for traffic management.
- The growing need for intermodal transport and especially inland navigation could benefit from a more harmonised information exchange between maritime and inland waterborne transport.

Furthermore, as inland navigation is a niche market, modality could benefit from learning from technological developments in the maritime world.

It was apparent there was a need to investigate these themes on a global level. For this reason, PIANC was the most suitable organisation to support such research, and consequently, PIANC Working Group 156 was initiated with its first meeting on 23 September 2013 in Maastricht, the Netherlands.

Since all the members of WG 156 had a background in the RIS environment, the investigations were based on an inland point of view.

As WG 156 progressed, the more interesting themes and topics relating to the interaction with Inland

Waterway Transport (IWT) became clearer, as the WG 156 members gathered more insight and knowledge on the level of maritime expertise, which was lacking at the start of WG 156.

The method used to solve this problem was doing additional desktop research work. Participation of several members in the Working Group during the

International e-Navigation Underway Conference in February 2016 gave more structure and insight to the above-mentioned desktop research. During this conference a meeting was organised to discuss various questions arising from the work of WG 156 with e-Navigation experts from IALA and IMO, including Omar Frits Eriksson, John Erik Hagen, Michael Baldauf, and Bill Cairns. It became clear that e-Navigation in the maritime world is in full progress, but many developments are in the preliminary stages.

Basic methodology followed by WG 156 to investigate the state-of-the-art in the e-Navigation environment in order to develop findings and results applicable for the RIS world was built on the foundation of e-Navigation knowledge, service, and experience in the maritime world. So, the main question to be addressed by WG 156 was ‘What can the RIS world learn from the maritime world in order to have inland waterway transport benefit and can this support inter-modality between the two modes of transport?’ The result of this comparison has been called e-Navigation for Inland Waterways.

This report is intended to be a significant input for the future development of RIS, including the upcoming update of the PIANC RIS Guidelines by WG 125 and the European RIS Directive, as well as significant input for the Digital Inland Waterway Area (DINA) initiative of the European Commission (EC) and the implementation of RIS on inland waters of the United States.

#### **Note**

The objective of this report is to provide information and recommendations on good practice. Conformity is not obligatory and engineering judgement should be used in its application, especially in special circumstances. This report should be seen as an expert guidance and state of the art on this particular subject.

PIANC disclaims all responsibility in case this report should be presented as an official standard.

*E-Navigation for Inland Waterways 2017* is available at a price of € 145.00. It contains 127 pages and can be obtained from: [www.pianc.org](http://www.pianc.org) -> [publications](http://www.pianc.org/publications)  
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The publisher is PIANC, Boulevard du Roi Albert II 20, B 3 – B 1000 Brussels – Belgium

Tel: + 32 2 553 71 61, Fax: + 32 2 553 71 55;

e-mail: [info@pianc.org](mailto:info@pianc.org)

[www.pianc.org](http://www.pianc.org)