



PIANC

The World Association for Waterborne
Transport Infrastructure



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Ship Handling Simulation Dedicated to Channel and Harbour Design

MarCom Working Group 171

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<https://www.pianc.org/publication/ship-handling-simulation-dedicated-to-channel-and-harbour-design/>

Ship handling simulation is a well-established and regularly applied tool for trafficability checking of existing, and design evaluation in planning phase of water ways and approach channels. In 1992 the report of Working Group 21 was published by PIANC dealing with the topic. 30 years' time span was regarded worthwhile to update and amend this report. At least considering the tremendous technical development since then, but also the additional and altered approaches and tasks ship handling simulation is and was applied to in the meantime.

The report shall be twofold useful: on the one hand, as a reference on the state of the art in approaches to perform ship handling simulation studies for design checking, including proof of safety and ease of trafficability. Second the report shall serve as an introductory handbook to all professionals dealing with waterway checking but with low or even none experience with ship handling simulation.

Therefore, the report is structured following step by step the established workflow when preparing and performing a ship handling simulation for water way investigation. Each step is clearly and thoroughly explained and amended by well-proven guidance on best-practice.

The authors hope the report will prove beneficial to the readers and last a decade at least as a reference for application of ship handling simulation as a tool in water way, approach channel and harbour design.

Notes to Editor

PIANC is the global organisation providing guidance and technical advice for a sustainable waterborne transport infrastructure to ports and waterways. Established in 1885, PIANC unites the international experts for technical, economic, and environmental topics related to waterborne transport. Our members include national governments and public authorities, corporations, industry and academic experts and young and experienced professionals.

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