



Guidelines for protecting berthing structures from scour caused by ships

Terms of Reference for Continuation

1. Historical Background

In early 2015 PIANC WG 48 published the document Report 180 “Guidelines for protecting berthing structures from scour caused by ships”.

This document contains a wide range of new information and guidelines as compared to the previous PIANC Working Group 22 “Guidelines for the Design of Armoured slopes under Open Quay Walls” (1997). This older guideline remains in force unless superseded by the new guideline (as explicitly stated in the introduction of the 180 report), which creates uncertainty and also missing information for those who are using the 180 report. Moreover, the 180 report contains unfortunately some errors causing confusion for users.

The recently published report represents an ambitious effort to establish very comprehensive guidance. Most similar documents undergo a process of continuous improvement and evolution, often with a standing committee responsible for keeping the document up-to-date. While a permanent working group is not being proposed here, the intent is to keep this committee active through a first revision/update of the recently published report.

2. Objectives of the Report

The objectives for the update of Report No. 180-2015 will be as follows:

- Add all available information of both guidelines and integrate in an updated Report 180
- Update the Report 180 based on feedback received from users
- Add more examples of scour protection systems (design and performance)

Upon completion, the updated document will provide guidance to owners and designers of berthing structures (ports, jetties,..) worldwide, to facilitate the protection of their berthing infrastructure.

3. Earlier Reports to be Reviewed

The primary reference will be Report No. 180-2015. Report No. PIANC Working Group 22 “Guidelines for the Design of Armoured slopes under Open Quay Walls” (1997) will also be considered and reconciled in the context of this revision.

4. Suggested Final Product of the Working Group

Updated and improved Report No. 180, incorporating all information of PIANC Working Group 22 and other issues as identified above.

5. Desirable Disciplines of the Members of the Working Group

Structural, coastal, geotechnical, mechanical engineering expertise will be required. This expertise was already represented in WG 180..

The UK national section has already agreed to have 1 new member joining the Working Group. Should there be an urgent need for extra expertise, the WG can call on expertise of reviewers of the previous version of the guidelines.

6. Relevance for Countries in Transition

The guideline will aid countries in transition since compliance with the standards will result in improved safety and environmental protection, taking advantage of the collective knowledge of the developed countries and major global stakeholders.

7. Climate Change Considerations

Climate Change needs to be considered in the planning and design of port infrastructure and civil engineering projects. The current document does not address this issue. In the new version climate change considerations will be integrated.