



Recommendations for the Design and Assessment of Oil & Gas Marine Terminals

Terms of Reference for Continuation

1. Historical Background

In September 2016 PIANC WG 153 published the document “Recommendations for the Design and Assessment of Marine Oil & Petrochemical Terminals”. This document explicitly excluded LNG terminals from the scope since it was believed to add unnecessary complexity to an already-ambitious undertaking. Now that the document is published there is a desire to add LNG terminals to the scope of the document and to make other updates as well.

Most of the content of the just-published document has commonality with LNG terminals, with appropriate language to be added for addressing the unique nature of LNG as the cargo. For this reason it is recommended to add LNG terminals to the just-published document rather than publish a separate document solely for LNG terminals, which would be too repetitive with the current document. In addition, the vast majority of the WG members also have extensive experience with LNG terminals in addition to oil & petrochemical terminals, so the WG can remain primarily intact.

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. 153-2016 will be as follows:

- Add LNG terminals to the scope of the document
- Update the document based on feedback received from users
- Add design guidance for additional countries/regions beyond the EU and USA currently covered explicitly

Upon completion, the updated document will provide guidance to owners and designers of Oil & Gas Terminals worldwide, to facilitate the protection of public health, safety and the environment.

3. Earlier Reports to be Reviewed

The primary reference will be Report No. 153-2016. Report No. 172-2016 will also be considered and reconciled in the context of this revision. In addition, standards including Canada’s CAN/CSA-Z276-15, California’s draft LNGTEMS standard, and other jurisdictional documents will be evaluated. Finally, other standards and references from organizations such as API, OCIMF, SIGTTO, ISGOTT, PIANC, and Nautical Institute will be reviewed.

4. Suggested Final Product of the Working Group

Updated and improved Report No. 153, incorporating LNG terminals and other issues as identified above.

5. Desirable Disciplines of the Members of the Working Group

Structural, coastal, geotechnical, mechanical, fire protection, and electrical engineering expertise will be required. This expertise is already represented on the current WG, so the WG 153 members will remain mostly intact. In the event some members drop off or additional expertise is deemed necessary, an appropriate call for members will be issued through PIANC HQ to the national sections per PIANC protocols.

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 coastal infrastructure and civil engineering projects. The current document addresses this issue in conducting risk assessments, during the establishment of site conditions and in the Basis of Design. The updated document will retain and enhance such guidance as appropriate.